CANADIAN INUIT USE OF CARIBOU AND
SWEDISH SÁMI USE OF REINDEER IN
ENTREPRENEURSHIP

A thesis submitted in fulfilment of the requirements for the

Degree of Doctor of Philosophy in Management

In the University of Canterbury

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University of Canterbury

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My husband, children, and grandchildren encouraged me and sacrificed our family time.

I dedicate this work to the First Nations, Inuit, Sámi and other indigenous people who have touched my life. I will honour your teaching by continuing to increase the sustainability of indigenous entrepreneurship through research, teaching, and service.
The primary objective of this thesis was to develop knowledge and understanding about how traditional resources can be used for entrepreneurship and economic development. This was accomplished by systematically studying how the Canadian Inuit, Swedish Sámi and other indigenous people use *Rangifer tarandus* for enterprise. The Inuit and Sámi are indigenous circumpolar people living in Canada and Northern Europe for more than 4000 years. *Rangifer tarandus* known as caribou or *tuktu* by the Canadian Inuit and reindeer by the Sámi has been a key resource for survival.

A literature review was conducted relating 1) to Canadian Inuit, Swedish Sámi and other selected circumpolar indigenous people use of caribou or reindeer for enterprise, and 2) indigenous entrepreneurship, particularly from traditional resources, and how this is affected by context and culture. Research methods included descriptive exploratory comparative cases, participative observation, snowball sampling as well as indigenous research methods. Five field sites were visited: Rankin Inlet and Coral Harbour in Nunavut; Inukjuak in Nunavik, Quebec; Happy Valley-Goose Bay/ North West River in Labrador; and Jokkmokk, in Northern Sweden.

The thesis explored: 1) Why are the Inuit hunters of caribou and the Sámi herders of reindeer? 2) What were the products and value-added processing? 3) Why have the Sámi successfully sold their meat and products in the international market while the Inuit have only recently begun to do so? 4) How has their culture and traditional knowledge affected the entrepreneurship including innovation and opportunity recognition? 5) What barriers have they faced and how have these been overcome? 6) How have they measured the success of their enterprises? 7) What can they learn from each other?

The findings indicated the Inuit and Sámi uses of caribou and reindeer for enterprise were very different. Context and culture were extremely important. Indigenous people living at similar latitudes and making use of a similar species had very different trajectories and outcomes in indigenous economic...
development and entrepreneurship from *Rangifer tarandus*. Themes such as resource availability, cultural propensity, remoteness and geographic location, kinship and social capital, infrastructure, measures of success, indigenous knowledge and wisdom, and innovation and adaptation were important.

This work made a significant contribution as little consideration had been given to the voice and perspectives of the Canadian Inuit and Swedish Sámi in the emerging field of indigenous entrepreneurship especially as it relates to traditional resources and practices. It also helped to identify other potential commercial uses of caribou thus it provided more potential value added from the commercial harvesting and processing. These opportunities could assist in increasing Inuit employment, income, self-reliance, and community esteem.

The research findings have implications for 1) the field of indigenous entrepreneurship, 2) policy makers, and 3) indigenous entrepreneurship education.

It provides international comparisons of two indigenous peoples using a similar species and focused on the use of traditional resources and culture as a basis for business creation and operation.

**Keywords** – Indigenous entrepreneurship; Inuit; Sweden; Canada; community entrepreneurship; Sámi; caribou; reindeer herding; Indigenous economic development; wild-life; traditional resources
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This article was based on my personal interview and the interview had conducted by phone but I had not visited Rambach or Donnan Handels.

Please state the nature and extent (%) of contribution by the PhD candidate:

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Contribution: Co-authorship

Name: Robert D. Anderson
Contribution: Grant funding, support, data collection, analysis and writing the text

Certification by Co-authors:

I, undersigned, certify that:

• The above statement correctly reflects the nature and extent of the PhD candidate’s contribution to this work and the nature and contribution of each of the co-authors.

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Name: Robert R Anderson Signature: Date: 1/8/2012

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Glossary

**ACIA.** Arctic Climate Impact Assessment.

**ACL.** Arctic Co-operatives Limited. The central service federation for 35 retail cooperatives across Arctic Canada.

**AEPS.** Arctic Environmental Protection Strategy.

**AMAP.** Arctic Monitoring and Assessment Program.

**ATVs.** All-terrain vehicles.

**Aboriginal.** The legally appropriate term in Canada, as embodied in the Constitution, includes Inuit, First Nations and Métis.

**Aiviit HTO.** Hunters and Trappers Association in Coral Harbour, Nunavut.

**Åjtte Swedish Mountain and Sámi Museum.** A museum and research centre in Jokkmokk, Sweden, which portrays the life of the Sámi and pioneering Swedish settlers.

**Amauti.** Hooded woman’s parka with a back pouch for caring infants and small children (plural: *amautit*).

**BIA.** Alaskan Bureau of Indian Affairs (BIA)

**BQCMB.** (Beverly and Qamanirjuaq Caribou Management Board). An organization to help manage two caribou herds that migrate across Manitoba, Saskatchewan, the Northwest Territories and Nunavut, and four different Aboriginal cultures. The Board safeguards the caribou herds in the interest of Aboriginal people who have traditionally relied upon caribou and the majority of its members represent aboriginal communities.

**Cache.** Meat stored outdoors on the land for future use.

**CAP.** Canadian Arctic Producers, an operating division of Arctic Co-operatives Limited.

**CFIA.** Canadian Food Inspection Agency.

**CHDC.** Coral Harbour Development Corporation.

**DEW-line.** The Distant Early Warning Line is a chain of 22 radar bases constructed across the Arctic of Canada and the United States during the Cold War of the 1950s.

**DFAIT.** Canada Department of Foreign Affairs and International Trade.
Dorset. A culture existing in the Eastern Arctic from about 800 BC to AD1000; called Tuniit by Inuit.

Duodji. Handicrafts made by the Sámi that used Sámi traditions, designs, patterns and colours. These were traditionally associated with reindeer herding but were not necessarily made from reindeer.

EDO. Economic Development Officer.

Elder. A person identified by the community as a “culture bearer” as they exemplify the values and lifestyle (not just their chronological age. According to Inuit Qaujimajatuqangit, elders serve as advisors, philosophers and professors.

Eskimo. Cree Indian word meaning “eaters of raw meat”. The term is derogatory and is no longer used to describe the Inuit.

EU. European Union.

FAO. Food and Agriculture Organization.

First Nation. The Canadian Constitution designates Aboriginal people as First Nation, Inuit or Métis.

FOB. Shipping term referring to the point of origin of the freight, who pays the shipping costs, and where responsibility for the items transfers.

Gáhkko. Freshly baked Sámi bread.

GNU. Government of Nunavut, Canada.

GNWT. Government of the Northwest Territories, Canada.

HACCP. Hazard analysis and critical control points.

HBC. Hudson’s Bay Company.

HTO. Hunters and Trappers Organization.

IAF. Inuit Art Foundation.

IASC. International Arctic Science Committee.

IASSA. International Arctic Sciences Association.

IBC. Inuit Broadcasting Corporation.

ICC. Inuit Circumpolar Council.

Igloo. A dome-shaped Inuit shelter made of ice blocks.

Inuujaq. Inuit doll for collectors.

Innu. First Nations peoples located in north-eastern Quebec and southern Labrador. They are not Inuit.

Inuit. (plural, 3 or more; Inuk, 1; Inuuk, two). Inuit are the Aboriginal people who live primarily in Nunavut, the Northwest Territories, the Yukon and northern parts of Labrador and Quebec. Inuit is the correct term that has replaced Eskimo.

Inuit Nunangat. The homeland of Inuit of Canada. It includes communities in Nunatsiavut (Northern coastal Labrador), Nunavik (Northern Quebec), the territory of Nunavut and the Inuvialuit region (Northwest Territories). These regions collectively encompass the land, water, and ice areas traditionally used and occupied by Inuit in Canada.

Inuit Qaujimajatuqangit. Inuit traditional knowledge and unique cultural insights.

Inuksuk. Rock cairn often shaped as humans that served as landmarks where Inuit had travelled. The inuksuk also attracted the caribou.

Inuktutit. Inuit language with eight dialects.

IPY. International Polar Year.

IPCC. Intergovernmental Panel on Climate Change.

IRC. Inuvialuit Regional Corporation.

ISAC. International Study of Arctic Change.

ITK. Inuit Tapiriit Kanatami (formerly the Inuit Tapirisat of Canada). The national Inuit organization in Canada.

JBNQA. James Bay and Northern Quebec Agreement.

Joik. Traditional music and singing of Sámi reindeer herders.

Kamiiit. Sealskin boots; the English version of the plural, kamiks, is often used.

Kativik. Inuktutit word meaning “meeting place”.

Keewatin. Previous name for the Kivalliq Region in Nunavut; because the name change took place only recently, both names are in common use.

KAF. Kivalliq Arctic Foods in Rankin Inlet, Nunavut a subsidiary of the Nunavut Development Corporation.
Kivalliq Region. Located in Nunavut, this region includes the communities of Repulse Bay, Arviat, Coral Harbour, Whale Cove, Rankin Inlet, Baker Lake and Chesterfield Inlet.

Kolte. Sámi traditional clothing.

Komatik or Qamutik. Long, slatted wooden sled designed by the Inuit. It was originally pulled by dog team but now more often by snowmobiles.

KPID. Kivalliq Partners in Development.

KRDC. Kativik Regional Development Council in Nunavik, Quebec.

LIA. Labrador Inuit Association.

LIDC. Labrador Inuit Development Corporation.

LCMA. Labrador Craft Marketing Agency.

Makivik Corporation. Société Makivik or Makivik Corporation, established in 1978, is the birthright corporation of Nunavik’s Inuit to administer the responsibilities and funds of the Inuit beneficiaries to the JBNQA.

Mikku. Traditional Inuit food consisting only of dried caribou meat sliced in very thin pieces. It has no salt or preservatives.

MFDC. Manitoba Food Development Centre.

NAF. Nunavik Arctic Foods, a subsidiary of Makivik in Quebec.

NDC. Nunavut Development Corporation in Nunavut.

NGO. Non-government organization which usually is not-for-profit.

NIC. Nunavut Implementation Commission.

NNI. Nunavummi Nangminiaqtaq Nunat.ikajuuti. The Nunavut Government and Nunavut Tunngavik’s preferential procurement policy for Inuit and northern based businesses.

NRI. Nunavummi Qaujisaqtulirijikkut. Nunavut Research Institute.

NTI. Nunavut Tunngavik Inc. This organization represents Inuit under the Nunavut It coordinates and manages Inuit responsibilities set out in the NLCA and ensures the federal and territorial governments fulfill their obligations.

NU. The northern Canadian territory of Nunavut.

NWMB. Nunavut Wildlife Management Board.

NWRIA. North West River Industrial Association.
NWT. The Northwest Territories of Canada which until April 1, 1999, comprised the central and eastern Arctic area that became Nunavut, plus the western Arctic.

NU. Nunavut. The territory was formed in 1999 when the Inuit of the Eastern Arctic voted to separate from the Northwest Territories.

PAME. Protection of the Arctic Marine Environment, a working group of the Arctic Council.

PIWA. Pauktuutit Inuit Women’s Association. This national organization represents the voice of Inuit women in 52 communities across Canada’s north. Members are heads of families and leaders of communities, mothers, girls, grandmothers and great grandmothers, teachers, caregivers and health providers.

PAME. Protection of the Arctic Marine Environment Secretariat.

Permafrost. Permanent ice in the ground, in the ocean and on the land. In the North, the ground below about one meter is permanently frozen.

Pukik. An Inuit delicacy made from caribou bone marrow.

Qallunaat. Inuktitut term for people with fair complexion or non-Inuit

Qualig or Qulliq. An Inuit oil lamp carved from soapstone. The hollow contains the fat, supuittit (moss) and wick. It is important to Inuit culture because it provided heat and light during the long, dark, cold winter.

RCMP. Royal Canadian Mounted Police; Canada’s national police force

Renomera. A large cooperative slaughter house and meat processing facility owned by several sameby located in Avidsjaur, Sweden.

SAON. Sustained Arctic Observing Network.

SSRHA. Swedish Sámi Reindeer Herders Association.

Saami or Sámi. Indigenous reindeer-herding peoples of Arctic Sweden, Norway, Finland and Russia.


Sámeportalen. A Sámi organization formed to provide administrative support and assist in maintaining Sámi culture for five sameby located near Jokkmokk, Sweden.

**Sealift.** Ordering equipment, goods and non-perishables (including food) from southern Canada for the entire year to be delivered by ship once per year during July and August when the ice is out of the harbour.

**Siksiks.** Ground squirrels in Inuktitut.

**Suovos.** Salted, smoked, and fried reindeer meat.

**Structuren.** Swedish for the business support centre.

**Tamakiklugin.** Hunter in Inuktitut.

**Thule.** About 1,000 years ago, a new group of people emigrated from northern Alaska to what is now Nunavut. Archaeologists believe the Thule to be the first of two Neo Eskimo subgroups.

**UC.** University of Canterbury, Christchurch, New Zealand.

**UNDRIP.** United Nations Declaration on the Rights of Indigenous Peoples.

**UNESCO.** United Nations Educational, Scientific and Cultural Organization.

**UNFCCC.** United Nations Framework Convention on Climate Change.

**U of R.** University of Regina, Regina, Saskatchewan, Canada.

**Ulu.** Crescent shaped knife made by attaching the steel blade to a caribou bone handle with caribou sinew. Inuit women use these to cut meat, trim skins or do intricate cuts when sewing clothing.

**Utilidors.** Insulated above-ground and underground pipes provide fresh water and plumbing for many buildings and houses as the ground is permanently frozen in Rankin Inlet, Nunavut.
1 Introduction and Research Rationale

The primary objective of this thesis was to develop a knowledge and understanding by working with communities of the impact of culture and context on indigenous entrepreneurial activity and economic development, particularly from traditional resources. This was accomplished by systematically studying how the Canadian Inuit and Swedish Sámi use *Rangifer tarandus* for enterprise. I focus on four communities in northern Canada where Inuit commercially harvest and process caribou: Rankin Inlet and Coral Harbour in Nunavut, Inukjuak in Nunavik, Quebec; and Happy Valley/Goose-Bay in Nunatsiavut, Labrador. The international comparative community is Jokkmokk, Norrbotten Sweden where Sámi commercially harvest and process reindeer. Figures 1.1 and 1.2 provide the maps showing the location of the sites.

In Canada, recent land claim settlements have recognised the rights of Inuit to make key economic decisions and benefit from traditional resources through hunting, harvesting\(^1\), processing, and trade. These settlements have provided Inuit with capital for investment in enterprise ownership and development. Individual and community enterprises, as well as indigenous and government development corporations, offer new opportunities for self-reliance, empowerment, and strengthening of local Inuit families and communities. With globalisation and new technologies, smaller enterprises have new opportunities and choices to participate in accessing local, national, and international markets. The Canadian Inuit asked researchers to look at other circumpolar northern communities for direction in developing sustainable entrepreneurship and northern economies.

I used comparative cases to highlight and explain similarities or differences between Canadian Inuit and Swedish Sámi cultures and context on indigenous

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\(^1\) In this thesis, I use “commercial caribou harvest” rather than “commercial caribou hunt”. According to Robert Connelly of Nunavut's Department of Economic Development in personal communication, the word “hunt” suggests the action of hunting (i.e. for sport or subsistence purposes) whereas the word “harvest” suggests the action of gathering resources for consumption. Furthermore, the term “commercial caribou harvest” has been widely accepted and applied within Canada.
entrepreneurial activity and economic development related to *Rangifer tarandus*. Limiting the attention to Inuit use of caribou and Sámi use of reindeer sharpened the focus on traditional resources and increased the ease of understanding and comparability. Therefore, researchers, policy makers or community leaders may better understand ‘how’ and ‘why’ indigenous culture and context affect the success of their enterprises. An improved understanding of context and culture will hopefully reduce the cycle of indigenous poverty and dependence that has existed for many years.

The remainder of Chapter One addresses 1) the context for the research, including the value of comparative studies, global changes affecting high latitude peoples, and the importance for entrepreneurship and economic development for the Canadian Inuit; 2) the research questions; 3) the timeliness of the research; and 4) its major contributions and an overview of the remaining thesis chapters.

1.1 **Context for the Research**

Welter (2011, p. 165 & 166) comments, “Context simultaneously provides individuals with entrepreneurial opportunities and sets boundaries for their actions....Context is important for understanding when, how, and why entrepreneurship happens and who becomes involved.” In this section, I discuss the value of comparative studies, indigenous peoples and *Rangifer tarandus*, global changes in high latitudes and the importance of Inuit entrepreneurship and economic development in Canada.

1.1.1 **Value of Comparative Studies**

When using comparative studies, researchers set out to examine particular issues or phenomena in two or more cases by using the same research instruments and methods. Terjesen, Hessels & Li (2013, p. 3) state, “They seek to identify and explain similarities and differences in the displays, sources and implications of the phenomena. For example, if something is observed in one case, why is it not observed in the other case.” The case study approach can disentangle sequences of events and complex relationships (*Poteete et al., 2010*; *Ragin, 1994*).
However, the case study approach has limited generalisability (Poteete et al., 2010; Ragin, 1994).

Comparative research in the context of Canadian Studies makes a valuable contribution. For example, researchers compare the past and present, economic regions, cultural groups, and Canada with other nations. Making the comparisons creates awareness and deepens our understanding of our institutions, our economic and social systems, our culture and society (Almond, Dalton, Powell & Strom, 2006, p. 31).

Comparative studies are of value to public policy because they provide a novel perspective on a province’s, territory’s or nation’s problems and the ways in which similar problems are experienced and handled. Through the identification of unique and common patterns, this might extend the range of possible policy approaches for consideration (Shackelford & Mouzos, 2005).

Social scientists have increasingly used multiple case studies as a research strategy (Rihoux, 2006; Flyvbjerg, 2006). Multiple comparative case studies allow for increased confidence in the generalisations made from the research (Ragin, 2014). However in entrepreneurship research, case studies and comparative case studies appeared in slightly over 5% of the articles published in North America (Brush, Manolova & Edelman, 2008, p. 255).

I used two types of comparative case research: 1) within Canada comparisons of Inuit peoples in three geographic and political nations and 2) between nation comparisons of the Inuit in northern Canada and the Sámi in northern Sweden. Using within Canada comparisons addressed the fallacy of assuming cultural and community homogeneity within nations (Tung, 2008). Using Canada versus Sweden comparisons recognised that national context such as institutional and cultural dimensions, resource endowments and norms influences how people view opportunities and choose to exploit them (Baker, Gedajlovic & Lubatkins, 2005; Oviatt & McDougall, 2005).

I discuss comparative case research methodology and its limitations further in Section 5.1.3.
Figure 1.1 Map Showing Inuit Research Sites in Canada

Figure 1.2 Map Showing Sámi Research Site in Sweden

1.1.2 Global Changes Affecting High Latitudes Peoples

The Arctic has about 4 million residents and (ADHR, 2004). Eight nation states have territory, and more than 24 indigenous peoples live there (ACIA, 2005). Most high latitudes people live along or near coastlines or along the rivers draining to the coast. This section discusses changes in climate and cryosphere, humans, economic development, governance, institutions and technology that are affecting high latitudes people.

Climate and Cryosphere

The international scientific community agrees that the rapid and sweeping changes in the climate and cryosphere are changing the Arctic globally. The peoples, their communities and their livelihoods are experiencing these changes (ACIA, 2005; AHDR, 2004; Duerden et al., 2009; Forbes, 2011; Gjorv et al., 2014; Hovelsrud et al., 2012; IPCC, 2001; IPCC, 2007; Murray et al., 2010; Kruse et al., 2008; PAME, 2013; Poppel, 2006, 2010; Poppel & Kruse, 2009; Wenzel, 2009).

Record increases in surface air, sea and ground temperatures are resulting in rapid losses of ice thickness and depth. According to Perovich et al. (2013, p. 1) the years 2007-2012, have produced the “sixth lowest sea ice minimum extents since satellite observations began in 1979”. Arctic surface air temperatures have warmed at twice the global rate (Anisimov et al., 2007). Precipitation has increased unpredictably in some locations accompanied by higher frequencies of extreme weather events such as freezing rain (Rinke & Dethloff, 2008).

The possibility of an ice-free Arctic Ocean is quickly appearing. This will open or expand Arctic shipping routes North to East and North to West. The North West Passage was open for its longest shipping season in 2013. These increases in shipping can potentially negatively affect breeding and migration patterns for sea and land life. Increased shipping increases the risks of spills and damage to the water and coastlines. It also increases accessibility to the Arctic by tourists and others.
The decreases in sea ice and the mushiness of thawing ice makes it difficult
Arctic people to travel on foot or use snowmobiles and ice sleds. In some cases,
they have shifted from hunting on ice to hunting by boat (Noongwook et al.,
2007).

The decrease in sea ice creates open water and allows stronger wave action that
rapidly erodes the coasts. Increasing sea levels and storm surges are also
seasonally flooding Arctic coastal areas and river deltas. This flooding disrupts
breeding patterns. It also increases the salt content of the grounds and freshwater
thus negatively affects the eco-systems. The flooding or break up of the winter
roads disrupts the major transportation system.

Climate warming is causing earlier appearances of peak nutritious plants in the
spring and also resulting in new plant species. The timing of caribou
reproduction has not shifted to match the changes thus lowering calf production
and survival. Vors and Boyce (2009, p. 26) note that 34 of 43 major herds
monitored in the last decade have declined and those for which census data was
available declined an average of 57 percent.

The early appearance and increase in the number of warble and nose bot flies
and mosquitoes disrupt grazing and result in reduced body condition and lower
fertility of caribou [and reindeer] (Vors & Boyce, 2009).

Deep snow and freezing rain have reduced herds of Perry caribou in Canada’s
northern Arctic, Svalbard reindeer in Norway and caribou in Siberia (Miller &

**Human**

Arctic peoples continue to hunt, herd, fish and gather. These activities, as well
as processing distributing, consuming and celebrating, are culturally, spiritually,
and socially important. Traditional local foods are nutritionally superior
compared to locally available imported foods, and they are often less expensive
(ACIA, 2005; Freeman, 2000). Caribou and reindeer are significant sources of
meat and income for northern people. For example, harvests of the Beverly and
Qamanirjuak caribou herd contribute approximately US$17.5 million annually
Reduced reindeer and caribou numbers have threatened the food security and well-being of some communities. In Canada, some communities have reduced or eliminated quotes allowing commercial caribou harvests.

Traditional language ability is disappearing in some communities. “Twenty-one Arctic languages have become extinct since the 1880’s with ten of these extinctions occurring after 1990 (ABA 2013 linguistics chapter)” (PAME, 2013 p. 25). The loss of traditional language has been hastened by the death of Elders, forced non-use of traditional languages in school, and increased computer and internet accessibility. The loss of a traditional language often accompanies loss of traditional knowledge – both are important in indigenous cultures practicing caribou hunting and reindeer herding.

Economic Development

People increasingly need non-traditional jobs for income to support a decent standard of living (AHDR, 2004). These wages often assist with equipment purchases and costs of participating in traditional hunting, harvesting and gathering activities. However, the new work schedules may reduce participation in traditional activities. As traditional lifestyles change, the women and youth of remote rural populations tend to migrate to larger centres as seen in Scandinavia, Iceland and Greenland (AHDR, 2004).

The major source of income continues to be government transfer payments and expenditures. Development of mining, oil and gas, and hydroelectricity provide opportunities for alternative employment and income as well as new contracts for businesses. Often, these developments increase demands for local and regional governments to offer more diverse services and to improve service quality and availability. The new government revenues from licenses, permits and taxes may assist in addressing these demands. The new sources of fuel may decrease local costs for power, heating, transportation and imported goods and foods.
Reindeer and caribou are highly vulnerable to competing land use. Exploration and development of mineral, oil and gas resources are disrupting reindeer and caribou grazing pastures, negatively affecting water and fishing, interrupting migration routes, and affecting breeding grounds (Reese et al., 2007; Stammler, 2005; Meis Mason, Anderson & Dana, 2008). Hydro-electric projects are flooding traditional lands occupied by Sámi and Inuit peoples. Timber harvesting is removing the old forests that provide food for the reindeer. As a result, herders must supplement feed and incur increased costs. Also, timber permits close access to traditional routes for reindeer migration. Therefore, the Sámi are incurring increased costs to truck the reindeer.

**Governance**

Outsiders are putting increasing pressure for the development of natural resources. Indigenous and local populations are demanding recognition of their traditional rights, increased consultation, and participation in the control and development of their lands and resources. They also want access to the benefits of jobs and new revenue streams from royalties, permits, licenses and taxes. Indigenous peoples are gaining self-governance, land claim settlement agreements and representation on co-management boards. Some examples include the Inuvialuit and Nunavut Land Claim Settlement in Canada, the Sámi Parliament in Sweden, Greenlandic Self Rule, and Alaska’s North Borough oil permits.

**Institutions**

After joining the European Union in 1995, Sweden and Finland gained access to its 27 member countries with reduced trade barriers. They also had to meet the higher trade requirements of the EU’s strict unified agricultural policy. The EU required Sweden and Finland to increase the economic participation of Sámi people. Norway, in contrast, has not become a member of the EU.

The creation of the Russian Federation from the Soviet Union in 1991 radically affected its reindeer herding. All federal subsidies targeted at reindeer herding
were reduced or cancelled, and the state-owned reindeer farms were eliminated (Rees et al., 2007).

Technology

Satellite television, computers, high-speed internet, and social media have connected high-latitude peoples to the world. New services have developed such as health or and mentoring using the internet. GPS has improved navigational ability, knowledge of species location and reduced some risks. However, GPS cannot substitute for traditional knowledge about species and ways to stay safe on land and sea (Gearhead et al., 2006; Noongwook et al., 2007; Nuttal & Callaghan, 2000). GPS, helicopters and snowmobiles have increased accessibility to caribou herds thereby increasing their vulnerability.

1.1.3 Importance of Entrepreneurship and Economic Development for Canadian Inuit

Land claims settlement agreements provide the means for Canadian Inuit to use their lands, financial resources, and benefits to build self-reliance and improve the socio-economic conditions and quality of lives within their communities. The agreements also provide “an opportunity to develop more attuned to Inuit values and resources, and perhaps show the rest of the world what sustainable development really means […] This allows] 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” (Nunavut Implementation Commission, 1995, p. 57).

In an address to the World Summit of Indigenous Entrepreneurs in 2003, Sheila Watt-Cloutier (then Chair of the ICC) explained that to the Inuit, a small entrepreneurial business supporting an Inuit family was very important. Furthermore, Inuit should have the right to choose both subsistence and participation in the global economy.

While our lands lend themselves to mega projects, our sense of sustainability lends itself to smaller entrepreneurial businesses […]. With the growing realisation that strong economies are essential for
cultural survival, we have come to attach more importance to economic and business development. [...] With the globalisation of the market economy, we cannot isolate ourselves from the world around us [...] We seek to be meaningful and influential participants. (Watt-Cloutier, 2003).

The Royal Commission on Aboriginal People (RCAP) found more Inuit lived in poverty than other Canadians. The RCAP (1996a, p. 334) recommended enhancing opportunities for employment and business development among the Inuit through import substitution, long-term strategically planned labour force training, promotion of internal trade, development of the small business sector, selective commercialisation of the wildlife harvest, specialised export development, and eco-tourism.

RCAP (1996a, p. 351) also recommended expanding the number and kind of opportunities available to Aboriginal young people and adults to earn a living, strengthening the traditional and mixed economy of the North, supporting both traditional sources of cash and employment and new ventures in areas not fully exploited, and ensuring development is undertaken in the context of environmental stewardship.

This thesis research addresses several specific research needs the Canadian Inuit had identified to assist with developing northern entrepreneurship and economic development. In Piliriaksaliuqatigikniq - A Conference on the Economy (NTI, 2002, p. 15), the Canadian Inuit indicate a need for more qualitative and case-based research which recognises Inuit culture and values and adopts a community-specific focus. In the Dialogue on Northern Research (Graham & Bonneville, 2004, pp. 9 & 24), Inuit suggest that Canada’s North should look east and west to other circumpolar northern communities for direction. My research addresses five of their research priorities for developing a sustainable, diversified northern economy:

- identify values, institutional mechanisms, [...] gap between traditional and new economic needs, alternative development models—incorporate the value of the traditional economy,
- identify indicators of sustainability (what are they & what is working),
- use case studies/assessments/success stories,
- evaluate vulnerabilities/resilience, and
- develop an international perspective.

At the *Canada-Aboriginal Peoples Roundtable 2004* (National Aboriginal Economic Development Board, 2004), the Inuit Break Out Group made numerous recommendations about economic development. My thesis research addresses the underlined portions of the recommendations.

- think outside natural resource extraction—also consider arts, traditional economy, and tourism,
- whatever economic opportunity developed have equal benefit and access for women,
- protect intellectual property rights,
- see more success stories,
- have more Inuit-specific programs and focus,
- support institutional and entrepreneurial pillars/cultures developing in the North,
- need all options to be sustainable,
- see more Aboriginal partnerships, including twinning and mentoring processes between Aboriginal businesses,
- use holistic approaches (integrate culture, heritage, community connected to the bigger Canadian community),
- need comprehensive economic development programs— with all economic development elements addressed together,
- need to look at barriers that deter local businesses,
- need for a northern perspective [...], and
- need research into resource development for commercial purposes; the knowledge of the commercial application of products is weak.

1.2 The Research Questions

To explore the use of *Rangifer tarandus* for subsistence and commerce, I asked the following questions:

1. Why have Inuit remained as hunters while the Sámi became herders?

2. Why have the Sámi successfully sold reindeer meat and products in the international market for some time, while the Inuit have not done this with caribou until recently?

3. What products and value-added processing are done by the Sámi/ Inuit?
4. How do Inuit/Sámi use and market their products? How do the Inuit/Sámi experiences compare?

5. How has Inuit/Sámi culture and traditional knowledge affected their enterprises, such as infrastructure, management processes, and approaches to harvesting, processing, and marketing of caribou/reindeer products?

6. What obstacles have Inuit/Sámi people faced with respect to entrepreneurship and how have these been overcome?

7. How have Inuit/Sámi people measured the success of their enterprises?

8. How has Inuit/Sámi people innovated, adapted, and used wisdom/traditional knowledge to be entrepreneurial with respect to caribou/reindeer?

9. What can the Inuit/Sámi learn from each?

When I sought permission from the Canadian Inuit communities to do the research, their first question was, “Who are the Sámi?” Therefore, the questions were rephrased for each data collection site, so each indigenous group only responded about themselves.

1.3 Timeliness of the Research

This research is timely for six reasons. First, the United Nations declared the years 1995-2005 as the “International Decade of Indigenous People” and the years 2005-2015 as the “Second International Decade of the World's Indigenous People.” The rights of indigenous people to self-determination and control of their lands and resources as well as to protect and support their culture have been recognised with ratification of the United Nations Declaration of the Rights of Indigenous People (2007), the revisions of International Labour Organisation’s C169, the Convention concerning Indigenous and Tribal Peoples in Independent Countries (ILO, 2011), and the implementation of The World Bank Policy on Indigenous Peoples OP/BP4.10 (World Bank, 2005).
Second, indigenous entrepreneurship is an emerging field, and the theory is under development (Dana, 2007; de Bruin & Mataira, 2003; Frederick & Foley, 2006; Hindle & Lansdowne, 2007; Hindle & Moroz, 2010; Peredo & Anderson, 2006). A thoughtful investigation of this process will make a significant contribution to this emerging research area.

Third, after more than twenty years of negotiation, the land claim agreements for Inuit in Nunavut and Labrador are settled and are being implemented. As a result, these Inuit have acquired financial and other resources that will enhance their capacity to participate in the global economy through entrepreneurship and business development. However, the Inuit want development to proceed on their terms, and with the assurance that their traditional lands, culture, history, values, and context will be maintained. The Inuit have identified a need for research on their traditional economy and its commercial potential, and my thesis research is consistent with that need.

Fourth, the Canadian government only started granting licenses in the mid-1990s for the Inuit commercial caribou harvests. Food security surrounding caribou is extremely important because of the poverty levels, the high cost of living, and the dependence on caribou as a keystone resource (Ford & Beaumeir, 2012; Tester et al., 2006). Some Inuit commercial harvests have continued while others have stopped. As previously noted, climate change researchers have noted that a warming climate has had a negative impact on the livelihoods of the Inuit and Sámi. Changing ice conditions have made it more difficult for the reindeer and caribou to survive and for the Inuit to hunt and harvest.

Fifth, the economic development of northern Canada has been very limited, particularly when compared to the rest of Canada (Desjardins et al., 2011) and Northern Europe. With increasing world demand (and prices) for resources, the development of northern resources and their transportation to market is becoming more economically feasible. The Canadian government budgeted CAN$90 million from April 1, 2009 to March 31, 2014 for strengthening the
drivers of territorial economies and economic diversification, and encouraging Northern and Inuit participation in the economy.

Six, Sámi reindeer herding has been adapting to new technologies and changes in government policies. As well, the Sámi have been diversifying into new enterprises such as tourism. Sweden has reviewed its legislation to determine if Sámi reindeer herders should have the right to undertake entrepreneurial activities.

1.4 Contributions of the Research

Theory building in the area of indigenous entrepreneurship and economic development has been largely based on descriptive or single cases (Hindle & Moroz, 2010 and Ostrom, 2011). This thesis advances our understanding of indigenous entrepreneurship by using multiple cases, collecting field data through interviews and participatory observation, and providing an international comparison. By using local indigenous languages and plain English, I broadened Inuit and Sámi participation in the research, thus enhancing its validity and ability to generalise. By translating the articles arising from the thesis research into Inuktutitut and circulating these to the Inuit participants, the research has had wider communication.

The research used a holistic approach by 1) focusing on the related uses of the traditional resource rather than a particular industry, 2) recognizing that men and women may use the same resource in different, yet complementary ways, and 3) exploring alternative decision-making processes and measures of success. By inviting Inuit and Sámi communities, entrepreneurs, elders, and government representatives to participate, the network was broadened. Because climate change is threatening the livelihood of the Inuit and Sámi, the research also compared current, local and commercial uses of caribou and reindeer. It also specifically asked about the adaptive and innovative change responses necessary for continued economic development.

This research makes several contributions to the field of indigenous entrepreneurship. First, it increases our understanding of the context of Inuit and
Sámi entrepreneurship and business development by providing insights into the factors that facilitate (or inhibit) their emergence, growth and success. This knowledge is essential for indigenous people who want to go into business, and for those who provide support services for such businesses.

Second, it develops knowledge that will help community leaders come up with more effective policies and programs to meet the needs of Inuit and Sámi communities and enterprises.

Third, the research findings challenge the misconception that the Inuit and Sámi cultures are static; rather, it is evident that Inuit and Sámi entrepreneurs are adapting and innovating to meet their changing circumstances.

Fourth, insights gained from comparing Inuit and Sámi enterprises suggest new opportunities and greater socioeconomic benefits but also illustrate how cultures can limit recognition and development of these opportunities.

Fifth, the research contributes to the study of indigenous entrepreneurship in other countries and to the field’s ability to affect the economic welfare of indigenous populations. This includes the circumpolar indigenous people who depend on Rangifer tarandus, but may extend to other groups that are using traditional resources and practices to build their economies.

Sixth, non-indigenous community development efforts—especially those emphasizing sustainability—will benefit from this research because traditional Inuit and Sámi approaches usually examine problems in their entirety, as opposed to developing individual solutions to specific problems. Indigenous approaches teach the importance of respecting interrelationships and maintaining balance and harmony. Industries like mining, oil and gas, and forestry may be able to use the information when engaging in stakeholder dialogue and developing creative strategies for resource management and mitigating the environmental and socio-economic impacts of their activities.

With improved theory in indigenous entrepreneurship, more appropriate capacity building can take place within academic institutions that are training the current and next generations of entrepreneurs. Many important questions
need to be answered: Who should be taught? What should be taught? How should they be taught to run their enterprises? (Foley, 2007; Hindle & Moroz, 2010; Saffu, 2003; Wihak, 2005). Is a community, individual or combined approach more appropriate, given the collectivist nature of indigenous groups? Should individuals receive skills training, so they are more capable of dealing with multiple stakeholders? Should the training involve not only the entrepreneur but members of the community as well?

1.5 Thesis Overview

The remaining chapters in the thesis are organised as follows:

Chapter 2 sets the stage for the research project. Section 1 addresses the definition of indigenous people. Section 2 focuses on caribou and reindeer as a keystone resource. Section 3 describes the global market for caribou and reindeer.

Chapter 3 elaborates on the Canadian Inuit, Swedish Sami, other selected indigenous reindeer herders in Europe, Russia, Greenland and Alaska, USA.

Chapter 4 discusses current Indigenous Entrepreneurship literature drawn from Canada, United States, Europe and Africa.

Chapter 5 describes the research methodology literature, justifies the design and process choices, and outlines the research approach.

Chapters 6 - 10 present the exploratory, descriptive case studies based on the field research in Rankin Inlet and Coral Harbour in Nunavut; Inukjuak in Nunavik; Happy Valley - Goosebay in Labrador; and Jokkmokk, Sweden.

Chapter 11 compares and contrasts themes from the case studies and links the research findings to the literature on indigenous entrepreneurship.

Chapter 12 concludes by presenting the significant findings; the implications of the research for indigenous entrepreneurship theory, policymakers, and education; the limitations of the research; and suggestions for further research.
To further appreciate the context of this research, Chapter Two overviews indigenous peoples and their use of *Rangifer tarandus* and discusses caribou and reindeer as a keystone resource and in the global marketplace. It then overviews the Canadian Inuit and Swedish Sámi and their respective economies related to caribou and reindeer. The chapter also acknowledges the use of reindeer for entrepreneurship by selected indigenous peoples in Norway, Finland, Alaska, USA and Greenland. Indigenous reindeer herding and related enterprises in other geographic such as Mongolia and China were beyond the scope of this thesis.

2.1 **Indigenous Peoples**

Over 370 million indigenous people live in more than 90 countries worldwide and speak 4,000 languages. Not all the indigenous peoples in these groups are poor. However, they make up more than 15 percent of the world’s poor and the disparity is growing. No universal definition of indigenous exists (Fredrick & Foley, 2006; Peredo & Anderson, 2006).

The International Labour Organisation (ILO) in Article 1,1b of the Indigenous and Tribal Peoples Convention 1989 (ILO No. 169) has defined indigenous peoples as:

> Tribal peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions. (ILO, 1989)

The lack of a standardised operational definition of Indigenous People may make it more difficult to identify the relevant literature to review.

How do indigenous entrepreneurship scholars define the term “indigenous”? Peredo, Anderson, Galbraith, Honig & Dana (2004, p. 5) provide an operational
definition of “indigenous” which includes “descent from populations inhabiting a region prior to later inhabitants”; “geographical, political, and/or economic domination by later inhabitants or immigrants”; “maintenance of some distinctive social-cultural norms and institutions”; “attachment to ancestral land and their resources”; “modern subsistence economic arrangements”; and “distinctive languages”.

According to Lindsay, Lindsay & Jordann (2005, p. 1), “An Indigenous person is an individual who is an original owner of a country’s resources or a descendant of such a person and which, in either case, the individual regards him/her self as Indigenous and the Indigenous community in which they live accepts them as Indigenous.” However, this definition is not sensitive to some indigenous worldviews where an individual does not own the land or its resources as all belong to Mother Earth. For example, Inuit did not own land but had historic patterns of rights to use land and resources. Families returned to traditional camps that were recognised within their communities and by other indigenous groups (Usher & Banks, 1986). Layton (1986) comments that Inuit were different from North Coast Indians by their open access to land and sea for food resources and their understanding that other community members have a demand right over the hunter’s gain.

Hindle and Moroz (2010, p. 15) use the following definition:

Indigenous people are individuals, groups, communities, or nations who reside as disadvantaged minority citizens or non-citizens of a mainstream policy, which, through the success of physical and cultural invasion, has come to dominate them in lands they once controlled or who have been displaced by the dominant hegemony from lands they once controlled.

The use of “disadvantaged minority” in this definition is problematic. In many African countries the indigenous people form the majority of the population.

An issue connected with all these definitions is the impact of colonisation and dominant groups on indigenous identity. For example, in Canada until the legislation changed in 1985, a First Nation woman who married a non-First Nation man lost her official First Nation status. A non-First Nation woman
who married a First Nation man gained First Nation status but if their children married non-First Nation individuals, this generation of children would be non-status First Nation.

Based on the themes described above, I define “indigenous peoples” as: 1) descendants from groups present in a region before the arrival of colonizers; 2) who self-identify and identify others as belonging to a distinct cultural group that is a non-dominant segment of society; 3) who maintain cultural and social identity which may or may not have a distinct language; and 4) who have historical continuity and a unique attachment to the traditional habitats, lifestyles and ancestral territories.

Given the contested status of definitions of who is indigenous, in my research the interviewees self-identify as indigenous.

2.1.1 Indigenous Peoples of the Circumpolar North and *Rangifer tarandus*

Indigenous peoples of the Circumpolar North have great diversity. They include the Inupiat, Yup’ik, Alitiiq, Aleuts and Athapaskans of Alaska; the Inuit, Inuvialuit, Dene, Gwich’in, Metis, Cree, Chipewyan, Innu, Naskapi, Dogrib, Koyakan of northern Canada; the Kalallit and Inughuit of Greenland; the Saami of Norway, Sweden, Finland and Russia’s Kola Peninsula; and the Chukchi, Even, Evenk, Yamal-Nenets, Nivkhi, Komi, Khant, Dolgani, Nangan, Sakat (Yakat), Chukchi, Yukagi, Koryak and Chuvan of Russia and Siberia; the Yu’pik of Siberia; the Evenks of Mongolia and China, and the Tsataan, or Dukha, of Mongolia.

*Rangifer tarandus* has 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 & Klokov, 2002; Anderson & Nuttall, 2004). The Inuit and Sámi people are two of more than 35 indigenous peoples that have harvested *Rangifer tarandus* (Ullevedt & Klokov, 2004). *Rangifer tarandus* has many names including reindeer, caribou, tuktu, and kumaruaq. It is a member of the deer family, Cervidae. Figure 2.1. shows the main herd regions for *Rangifer tarandus* in the world.
This circumpolar species with its wide hooves and heavy fur is well adapted to natural northern habitats and extreme cold. It eats many different kinds of local flora and fauna depending on availability and time of year. Reindeer and caribou are slightly genetically different. In Canada, some caribou species and herds migrate across 3000 kilometres while others stay within a small region. In Europe and parts of Russia, reindeer are herded. In Alaska, reindeer are ranched. Today, many Indigenous people use *Rangifer tarandus* for entrepreneurship.

Many northern latitudes indigenous peoples still depend on caribou and reindeer as a subsistence resource for their survival. Reindeer and caribou are keystone species intricately interrelated in the Arctic food web. Although caribou are similar to reindeer, they are genetically different and smaller. Both eat the abundant supply of lichens, mosses, sedges, mushrooms, and willows.

Caribou is a nutrient dense food. Eating all parts including meat, milk, organs, blood, bone marrow, and fat provides the majority of nutrients required by the body. Vitamin D is the only essential nutrient that is lacking (Kuhnlein, Chan,
Legge, & Barthet, 2002). The meat is lower in fat and higher in protein and calories than other meat such as beef and pork (see Table 2.1.)

Table 2.1 Comparison of caribou with other meat sources

<table>
<thead>
<tr>
<th>g. per 100 g. portion cooked</th>
<th>Caribou</th>
<th>Beef</th>
<th>Chicken</th>
<th>Pork</th>
<th>Lamb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat</td>
<td>1</td>
<td>23</td>
<td>13</td>
<td>45</td>
<td>28</td>
</tr>
<tr>
<td>Protein</td>
<td>38</td>
<td>17</td>
<td>20</td>
<td>12</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: Beverly and Qamanirjuaq Caribou Management Board, 2003

Canadian Inuit do not own or confine caribou. After first sharing with Elders, they distribute the remaining meat, bones, and skin to their family and community (Usher, 1986; Usher, Duhaime & Searles, 2003; Nuttall, 2000). They traditionally cached excess meat and skin for future needs (Usher, 1986). If nearby settlements are short of food, kinfolk share or trade meat with them.

A 2001 Statistics Canada survey found that almost one-third of Inuit households in Nunavut, Canada ate caribou daily or almost daily.

The Canadian Inuit use caribou for food, clothing, shelter, packaging (bags and caches), tools, transportation, ceremonial artifacts, arts and crafts, and medicines (Kofinas, Osherenko, Klein, & Forbes, 1999; Jernsletten and Klokov, 2002; Anderson and Nuttall, 2004). Table 2.2 details the various traditional uses. I created the table from descriptions in the literature then showed this to the Canadian Inuit at the field research sites and added their suggestions.

The Sámi also had many uses for reindeer (Oskar, 2009). Reindeer meat, bone marrow, milk and blood were used for food; innards for sausage casing; antlers for knives; skins for tents, floor covering, shoes and clothing; and sinews for sewing. Blood was given to people and dogs. The Sámi used the reindeer’s milk; however, the Canadian Inuit did not.

Caribou and reindeer provide a significant source of meat and income for northern people. For example, in 2008 the Beverly and Qamanirjuaq Caribou Management Board in Canada (BQCMB, 2008) estimated the value of the
Table 2.2 Traditional Inuit caribou use in Northern Canada

<table>
<thead>
<tr>
<th>Part</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat</strong></td>
<td>Food (every part eaten), pemmican (converted), hump ribs, sun-dried mipku, jerky, inner parts eaten on the spot, dried (soaked and boiled), ground; cached; frozen (sliced and eaten raw); nipko dipped in cod liver oil</td>
</tr>
<tr>
<td><strong>Hide/skin</strong></td>
<td>Container, pail, rope, footwear, boots, mitts, parka, caps, trousers, drum, splint, mask, blanket, snowshoes, cradle, summer tent, cache cover, roof, , sleeping bench cover, cushions or bases for sled, diaper, ball, doll, knife case, bullet pouch, sled runners, water bucket, sled cover, bottle, kayak, nipple protectors (for dogs), tobacco bags, needle cases, bandage</td>
</tr>
<tr>
<td><strong>Hair/fur</strong></td>
<td>Pillow, rope, ornament, hair piece, bracelet, medicine ball, doll stuffing</td>
</tr>
<tr>
<td><strong>Bones</strong></td>
<td>Pipe, knife, spear or arrow point, splint, sled, club, scraper, awl, shovel, needle, lance (medicine), paint brush, fish hook, game dice, drill, mouth piece, marrow for food</td>
</tr>
<tr>
<td><strong>Horns/antler</strong></td>
<td>Harpoon, spear or arrow point, cups, fire carrier, spoon, ladle, toy, figurines, carving, button, needle, fish hook, drill, drying rack</td>
</tr>
<tr>
<td><strong>Stomach lining</strong></td>
<td>Meat wrapping, cup, basin, canteen, container</td>
</tr>
<tr>
<td><strong>Tail</strong></td>
<td>Medicine, switch, fly brush, decoration, whip, toy</td>
</tr>
<tr>
<td><strong>Fat</strong></td>
<td>Eating raw or fermented (choice food), cooking, soap, hair grease, oil for lamp, skin protection, medicine, wound cleaning</td>
</tr>
<tr>
<td><strong>Skull</strong></td>
<td>Mask, medicine, ceremony</td>
</tr>
<tr>
<td><strong>Muscles</strong></td>
<td>Glue, thread (sewing and medicine), arrow tie, cinch, bow string</td>
</tr>
<tr>
<td><strong>Hoof, Feet</strong></td>
<td>Choice food, glue, rattle, decoration, spoon</td>
</tr>
<tr>
<td><strong>Bladder</strong></td>
<td>Pouch, bag, medicine, heating liquid</td>
</tr>
<tr>
<td><strong>Dried dung</strong></td>
<td>Fuel, diaper powder, signal</td>
</tr>
<tr>
<td><strong>Teeth</strong></td>
<td>Ornament</td>
</tr>
<tr>
<td><strong>Tongue</strong></td>
<td>Choice food, comb</td>
</tr>
<tr>
<td><strong>Brain/Liver</strong></td>
<td>Food, hide preparation, tanning</td>
</tr>
<tr>
<td><strong>Heart</strong></td>
<td>Food, bandage</td>
</tr>
<tr>
<td><strong>Tendons/Sinew</strong></td>
<td>Thread for sewing, pulling teeth, bow string, wrapping, attaching spear heads, iron hooks, handles on knife and ulu</td>
</tr>
<tr>
<td><strong>Hind leg skin</strong></td>
<td>Pre-shaped foot gear</td>
</tr>
<tr>
<td><strong>Membrane</strong></td>
<td>Dried and split for sewing thread</td>
</tr>
<tr>
<td><strong>Milk</strong></td>
<td>Feeding babies</td>
</tr>
<tr>
<td><strong>Blood</strong></td>
<td>Tasty blood soup (qayuq) for health, glue</td>
</tr>
<tr>
<td><strong>Lymph nodes</strong></td>
<td>Medicine</td>
</tr>
</tbody>
</table>

Sources: Integrated from INAC Youth Buzz (2004), Pulaarvik (2005), Thorpe, et al. (2002), Hawkes (1916), Hutton (1912), and Canadian Inuit interviewees.

resident caribou harvest at about CAN$19.5 million dollars; however, the Board indicated the cultural value could not be estimated. To the circumpolar Inuit, caribou and reindeer are more than economic activity; they form an integral part of their social and cultural way of life. These include education in traditional
ways of life, kinship and bonding, recreational enjoyment, spirituality and celebration. Vors and Busch (2009) suggest this may be best summed up by how circumpolar peoples identify with the reindeer or caribou. “If the reindeer do not come, there will be no Eveny” (Vitebsky, 2005).

2.2 The Global Market for Caribou and Reindeer

In this section, I discuss 1) some products sold from deer, reindeer, and caribou; 2) the global market for reindeer/caribou meat and velvet; 3) changes in the global meat industry; 4) increases in agri-food safety; 5) differentiation in meat products such as nutritional value and disease prevention, local production, organic, and halal; and 6) interest in animal welfare.

2.2.1 Products from Deer, Reindeer, and Caribou

De Voos (1982) lists the following products from live deer [including reindeer]: velvet [panty], musk and milk. Also, reindeer semen is sold internationally for artificial insemination (p. communication with Norman Mitchell, Nature’s Peace). After slaughter, the following deer parts are sold: meat, skins, tails, pizzles [penises], sinews, glands, tusks and antlers, bones, hearts, livers, tongues and kidneys. In North America, reindeer and caribou meat compete as an exotic meat with deer, elk, buffalo, wild boar, ducks, goose, camel, emu, ostrich and kangaroo.

2.2.2 Global Market for Caribou and Reindeer

According to Heikkinen (2006, p. 187) quoting the Reindeer Herders Association, “Currently there is no information about the gross economic value of the reindeer economy (e.g. inclusive of tourism, refining, indirect value), but it has been estimated to be many times that of the value of unrefined meat markets.” Although it contributes a small share of the overall economy, the market value of reindeer husbandry accounted for CAN$35 million annually in Finland (Jernsletten, 2002) and CAN$12.1 million in Norway (Riseth, 2006). In 2013-2014, about 2,000 to 3,000 tons of reindeer meat was produced annually in Finland, 1,900 tons in Norway, and about 1,200 tons in Sweden (Wiklund et
al., 2014. P. 56). About 70% of this comes from the slaughter of calves (Muuttoranta, 2014).

The global market for reindeer/caribou meat was estimated at less than 175,000 animals per year in 2007 (Humphries, 2007, p. 1). Exporting countries included Sweden, Greenland, Norway, Finland, and Canada. Sweden was by far the largest net exporter at 325 metric tons in 2005. When Sweden and Finland joined the European Union in 1995, they gained access to its 27 member countries as well as those countries that had trade agreements with EU members. For reindeer herders, this resulted in reduced trade barriers but also stricter agricultural practices. Canada’s exports of high-end caribou meat products to Europe currently face an 18% tariff. Although Humphries did not mention Russia, Stammler (2005) documented its entry into international exports for both reindeer meat and velvet (panty).

Since Humphries report in 2007, the supply and demand interaction has changed considerably. Uttiset News (2013) reported that Finland could not meet its internal demand for reindeer meat products, and it turned down orders from Germany, France and Spain. Germany’s order for 100,000 reindeer was greater than all of Finland’s domestic reindeer production. Greenland is primarily servicing its local market and has small exports to Canada (p. comm., Stefan H. Magnusson).

As the local supply of reindeer declined, countries began to import reindeer from Russia and farmed deer from New Zealand. In 2008, Yamal-Nenets exported reindeer meat to Germany, Italy, Greece and Latvia (RT Business, 2008). Vorotnikov (2012) reported that the Russian Company JSC Meat Products and Chinese company Hainan Tansini created a joint enterprise to develop a reindeer meat processing complex in the Yamal-Nenet Autonomous District of Russia. The new complex will produce up to 20,000 tonnes of finished reindeer products annually.

Reindeer is a specialty meat product and often competes with red deer meat farmed in Europe and imported from New Zealand. Reindeer accounts for less than one percent of consumed meat in Finland. New Zealand is the world’s
largest exporter of farmed deer products. It has about half the world’s farmed deer population with 1.7 million animals on 5000 farms (Canadian Cervid Alliance, n.d.). New Zealand exports about 90% of red deer products (venison, velvet and co-products (Hoffman & Wiklund, 2006). In 2012, New Zealand exported 14,910 tonnes of venison with a total value of NZD$187 million (CDN $163 million) to Germany, United States, Belgium, Netherlands, Finland and Switzerland (Deer Industry News, 2013, p. 21). Sámi reindeer herders indicate that imports of New Zealand deer meat have reduced the demand for reindeer meat thus reducing their profitability (Keskitalo, 2008).

2.2.3 Changes in the Global Meat Industry

The global meat industry is undergoing profound change. Over a twenty year period, aggregate meat consumption increased by “almost 60% from 175,665 thousand tonnes to 278,863 thousand tonnes” (Henchion et al., 2014, p. 561). This increase is a function of the world population growth but also increased meat consumption due to rising incomes, urbanisation, and nutrition transition. In the same period, “per capita consumption increased by almost 25% from 33.7 to 41.9 kg per capita” (Henchion et al., 2014, p. 561). Consumers also switched from red meat to white meat, with consumption of white meat increasing by 125% (Henchion et al., p. 562). World meat consumption is expected to grow at 1.7% per annum by 2021; mostly occurring in Asia, Latin America, the Middle East and developing countries (Henchion et al., p. 562). Consumers are demanding a broader diversity and quality of meat, more ease of preparation, and enhanced assurances about product safety (Morgan & Prakash, 2006).

Increased meat production and lower prices have resulted from declines in feed prices, increased specialisation, enhanced management, veterinary services, selective breeding and improved meat processing and packaging technologies (Morgan & Prakash, 2006). The increasing use of automation and computer control systems has resulted in greater product uniformity and quality (Barbut, 2014). Meat processors are better able to produce a diversity of cuts for different markets targeted at consumers with a variety of preferences and tastes.
Competition has increased significantly from the entry of developing countries into the global market. Changes in WTO policies have reduced the use of export subsidies and preferential tariffs and expanded the access to markets, particularly in Asia (Bojnec & Ferto, 2014). Bilateral and regional trade agreements have also facilitated growth in meat trade. Production and processing practices in developing countries may be lower thus placing consumers at risk. However, foreign investment and knowledge sharing have assisted in improving food safety and quality.

### 2.2.4 Increases in Agri-food Safety

Food safety relates to ensuring the food is free of pathogenic microorganisms, chemical contaminants or foreign particles that can cause illness and fatality in humans and animals. International meat markets have increasingly been affected by animal disease outbreaks such as foot and mouth disease (FMD), avian influenza (AI), mad cow disease or bovine spongiform encephalopathy (BSE), and chronic wasting disease (CWD). These outbreaks have resulted in trade bans of a country’s product, price reductions, and shifting of consumer consumption to alternative protein sources.

Consumer confidence in the food industry has been shaken by recalls of food products aimed at humans and animals. For example in February, 2007 North America had a large recall of pet foods tainted with melamine. However, the FDA broadened the alert for possible melamine contamination on April 27, 2007 to all vegetable protein products originating from China. The specific products in this alert included: wheat gluten, rice protein concentrate, corn (gluten, meal, and by products), soy (protein and gluten), and mung bean protein (U.S. FDA, 2009).

Pathogens such as *Escherichia Coli* and *Listeria monocytogenes* can enter foods during the processing of meat and dairy products. For example, in 2015, Denver’s Frontière Natural Meats LLC recalled ground elk meat for *E. Coli O157:H7* contamination (News Desk, 2015) and in 2009, Alaska Sausage Co. recalled sausage links made with reindeer meat (Juneau Empire, 2009). Pathogen contamination can result in flu-like symptoms, severe illness, organ
failure and fatalities in humans. The incubation period for *Listeria* is about 70 days and people often don’t associate mild flu-like symptoms with the pathogen or report it (Schoder et al., 2014; Popovic, 2014). Outbreaks and food recalls often occur regionally and nationally but increasingly have extended across national borders.

Agri-food standards, particularly for safety and quality have increased, broadened and become much stricter at both the government and corporate level (Lee, Gereffi & Beauvais, 2012; Charlebois, 2011; Morgan & Prakash, 2006). At the national and international level, government legislation regulating and monitoring the quality and safety of food has increased in breadth and stringency. For example, EU Directive 94/43 of the Hygiene of Foodstuffs requires identification of steps critical to food safety and the development of procedures, processes and controls based on Hazard Analysis and Critical Point Control (HACCP) (Trienekens & Zuurbier, 2008, 110). The US FDA now requires importers to verify that foreign food suppliers have all controls in place and that this is certified by a third party (Matthews, 2014).

The Global Food Safety Initiative launched ten years ago has several benchmarked audit schemes which are accepted internationally: Safe Quality Food, British Retail Consortium, Food Safety System Certification, International Featured Standards, European Retail Good Agricultural Practices (EUREP-GAP), CanadaGAP, and Global Red Meat Standard (GRMS) (Matthews, 2014; Trienekens & Zuurbier, 2008). Unlike, HACCP and ISO systems, these systems include retailers and other parties in the food chain. Retailers and suppliers, by identifying and controlling potential risks, can protect brands and increase consumer confidence. The multitude of standards in industrialised countries “differ from country to country and from market to market” (Trieneken & Zuurbier, 2008, p. 119). The costs of obtaining and maintaining certification are high and may be burdensome for smallholders and meat processors. They have three choices to meet higher standards and regulations: upgrade practices and product quality, downgrade or exit (Lee, Gereffi & Beauvais, 2012).
The world marketplace is suggesting the need for traceability systems for meat products from individual animals. These systems ensure the record keeping extends from the animal’s birth, through feeding and farming, ownership changes, harvesting, slaughtering, processing, distribution and transportation, wholesale and retail storage, processing and marketing and finally, to the consumer (Shackell, 2008; Nortje, 2005). Traceability is helpful in protecting a brand or niche market from frauds. As a company introduces a traceability system, it tends to develop relations with a network of preferred suppliers and intermediaries. This may block out smaller holders and meat processors and new entrants.

Often the argument is made that traceability systems will be too costly, slow productivity and reduce throughput. Nortje (2005) suggests that using previously unavailable date and monitoring product attributes and processes can increase productivity, yields and profitability. Hancox (2005) describes how movement traceability aids in ear tags are used to eradicate bovine tuberculosis in New Zealand’s cattle and deer as required by the Biosecurity (Animal Identification Systems) Regulation 1999. She noted this system currently does not support the needs of quality assurance for full paddock to plate traceability.

2.2.5 **Product Differentiation**

Meat products are becoming differentiated on attributes such as nutritional value and disease prevention; organic; animal care; locally produced; and ethnic or religious appeal. Consumers are eating less red meat and switching to poultry, pork and fish in efforts to reduce cholesterol and prevent heart disease (Hoffman & Wiklund, 2006; Siró et al., 2008). Consumer value the meat attributes of flavor, tenderness, leanness, nutrient content in reindeer meat (Dransfield, 2003). When cooked with the correct techniques, meat from reindeer and red deer meet these requirements (Hoffman & Wiklund, 2006). The reindeer meat produced is a small percentage of the total meat market thus it can command through marketing and direct sales higher prices (Muuttoranta & Mäki-Tanila, 2012; Wicklund et al., 2014).
When comparing the standard commercial production of beef, pork or poultry with that of free-range production systems such as used in reindeer husbandry in Europe, consumers found the latter to be more animal friendly (Wicklund et al., 2014).

Consumers concerned with food quality, safety, and lack of transparency increasingly are turning to foods locally produced and directly marketed (Feldmann & Hamm, 2015). This has been facilitated by governments trying to strengthen their local economies and supporting the reintroduction of local farmers’ markets (Vecchio, 2009). More environmentally conscious consumers are switching to products which are organic, locally produced, or use low inputs (Dransfield, 2003).

In 2012, Schaack et al. (2014, p. 207) noted that the United States was the largest organic market in the world at 22.6 billion Euros. The European Union followed closely at 20.6 billion Euros. Organic markets have been growing at an annual rate of 9% or higher (da Veiga Dias, 2015). Organic meat and meat products account for about 10% of all organic products in many countries. In terms of the total meat market, organic meats generally account for about 2% (Naspetti & Zanoli, 2012). This small market share is usually attributed to the premium price that consumers must pay for the organic meat and meat products. To facilitate consumer identification of organic products and stimulate internal markets, specific certified organic labeling was introduced in the European Union in 2010 (Zander et al., 2015) and in the United States in 2002 (US FSIS, 2013).

As caribou in northern Canada are wild and not given feed, the meat is marketed as organic and chemical free. During the 2003 Bovine Spongiform Encephalitis (Mad Cow Disease or BSE) crisis in Canada, Kivillaq Arctic Food's caribou meat products were granted exemption from the US ban on imports of Canadian products from ungulates because the Southampton Island herd was geographically isolated, ranged free, and ate no feed supplements (Poole, 2003; p. comm. with Brian Schindel, 2003).
Specialty ethnic and religious markets for meat are also growing. Global halal meat markets have experienced large growth and development for more than 20 years. In 2007, the global halal market was valued at “US $150 billion” (Bergeaud-Blackler, 2007, p. 966). This increased demand is linked to increasing numbers of Muslim immigrants, growing consumption of meat as income levels have increased, and Muslims reinforcing their identity by consuming authentic halal products (Lever & Miele, 2012). Halal meat and meat products are increasingly available in ethnic butcher shops, non-Muslim supermarkets and fast food outlets (Lever & Miele, 2012).

Ritual slaughter involves the animal receiving a Muslim blessing, being conscious (not pre-stunned), having its throat slit with a knife and having its blood drain completely after slaughter (Bergeaud-Blackler, 2007). New certification bodies attest to Muslim consumers that the product was produced with authentic halal processes and they have developed special labels to indicate this (Lever & Miele, 2012). The EU allows member countries to exempt slaughter houses that supply Muslim communities from the requirement to pre-stun animals so they are unconscious before slaughter. Remaining parts of the carcass not required for the halal market may go into the conventional markets unlabelled (Lever & Miele, 2012).

Reindeer meat products have recently entered the international halal market. There is a huge potential demand for halal venison products and wide marketing outlets and distribution channels already exist (Dahlan, 2009). The slaughtering, butchering, processing, and marketing of the reindeer meat must be in strict accordance with Muslim dietary laws based on The Quran. Islam Today (2010) and Moscow Times (2010) reported that Russia had formed a joint venture with Qatar and was exporting halal reindeer products to Muslims internationally as well as marketing canned halal meat in Russia. The joint venture was planning a separate slaughter house, canning and sausage factory in the Yamal-Nenets district. In 2013, a specialty wildlife abattoir in Norway used its mobile slaughterhouse and small meat-processing plant to produce halal reindeer meat. The owner intended to sell the meat in the Dubai and local Norwegian markets (Burgess, 2013).
2.2.6 Interest in Animal Welfare

Rising consumer interests in animal welfare are affecting practices in farming, slaughter houses, meat processing and meat marketing (Barbut, 2014; Bergeaud-Blackler, 2007; Grandin, 2013; Henchion et al., 2014). For example, animal welfare activists in Norway have protested the starvation of kept reindeer and indicated reindeer herders were responsible to ensure supplemental feeding (Reinert, 2007, p. 137). They also have spoken out against the Sámi traditional killing of reindeer using a curved knife (*krumkniv*) to stab the neck or to pierce the heart (Reinert, 2012, p. 37). Norway and other countries effectively banned this technique in the 1930s by passing legislation that required animals be stunned prior to letting of blood. According to Reinert (2012, p. 47), “The EU directive […] 93/119EC ‘on the protection of animals at the time of slaughter or killing’ prohibited the knife’s use.” In 2004, the Norwegian Minister of Agriculture indicated that prohibitions on the use of the curved knife applied only to slaughter of animals in abattoirs. The Norwegian Animal Protection Alliance protested and filed a complaint against the government describing the technique as inhumane, barbaric, and primitive (Reinert, 2012, p. 48-49). In 2008, new directives were issued that allowed the Sámi to use the curved knife outside slaughterhouses as an exercise of Sámi culture (Reinert, 2012, p. 51).
3 Canadian Inuit, Swedish Sami and Other
Selected Indigenous Peoples’ Use of
Caribou/Reindeer for Enterprise

In Chapter 3, I provide a broader context of the participation of specific Indigenous peoples in commercialising their traditional reindeer resource by examining literature pertaining to the Canadian Inuit, the Swedish Sami, and other selected Indigenous reindeer herders from Finland, Norway, Russia, Greenland and Alaska, USA. The thesis does not include Indigenous reindeer herders in other geographic locations such as Mongolia and China.

3.1 Canadian Inuit

The Indigenous people of Canada are called Aboriginal peoples and include the Inuit, First Nations (Indians) and Métis as identified in The Constitution Act, 1982. According to the 2006 Canada Census, 1,172,790 or 3.3 percent of Canada’s population self-reported as Aboriginal. Among people who identify themselves as Aboriginal, 50,485 were Inuit; 389,785 were Métis; and 698,025 were First Nations. Between 1996 and 2006, the Aboriginal population grew by 45 percent, compared with 8 percent for the non-Aboriginal population (Statistics Canada, 2006a). “Children and youth aged 24 and under made up almost one-half (48%) of all Aboriginal people, compared with 31% of the non-Aboriginal population” (Statistics Canada, 2006b). In 2002, the fertility rate of Nunavut at 3.04 was the highest in Canada and compared to 1.5 for all Canada (CCSD, 2006 a, p. 5).

Canadian Inuit are the Aboriginal people of Northern Canada. The Inuit Circumpolar Conference adopted Inuit as the designation for all Eskimos, regardless of local usages. Eskimo is a Cree word meaning “eaters of raw meat” and is disrespectful. According to the Inuit Tapiriit Kanatami (ITK) (2011), “Canadian Inuit consider the land, water, and ice of our homeland to be integral to our culture and our way of life”. Therefore, the Canadian Inuktitut words “Inuit Nunangat” are used to describe their homeland that covers more than one-
third of Canada’s land mass. It extends across northern Labrador and Quebec, Nunavut, and the Northwest Territories and includes coastal water and ice zones. Historically, Inuit led a nomadic lifestyle moving between winter and summer encampments. In the mid-1950s, the Canadian government encouraged the Inuit to resettle in communities. However, they still spend a lot of time on the land. Figure 1.4 shows the regions and communities of Inuit Nunangat.

Unlike First Nations people, the Inuit have not lived on reserves and have not been covered by the federal Indian Act (R.S.C., 1985, c. I-5) since 1951 (Leslie, 2002). However, the Inuit in Quebec, Nunavut and the Northwest Territories have been under the mandate of Indian and Northern Affairs Canada, and many policies and programs targeted at Inuit and First Nations people have been similar. When Labrador and Newfoundland joined Canada’s confederation in 1949, the Inuit living in Labrador continued to be administered by the Labrador and Newfoundland government but the federal government provided funding to support these services.

Figure 3.1 Map of Inuit Nunangat
3.1.1 **Geographic Description**

The Inuit have settled several comprehensive land claims with Canada including *the James Bay and Northern Quebec Agreement* (1975) (amended 1993), *Northeastern Quebec Agreement* (1978), *Inuvialuit Final Agreement* (1984), *Nunavut Land Claims Agreement* (1993), *Labrador Inuit Land Claims Agreement* (2005), and *Nunavik Inuit Land Claim Agreement* (2006). The Inuit see the land claim settlements as an opportunity to regain control of traditional lands and activities, to develop their economies more in tune with Inuit values and resources, and to improve the socio-economic conditions and quality of life for individuals, families, and communities (NIC, 1995; Myers, 2000a; Arnakak, 2002; Watt-Cloutier, 2003).

Nunavik in northern Quebec stretches north from the 55th to the 62nd parallel. It is bounded on the east by Ungava Bay and Labrador, on the west by the Hudson Bay, and on the north by the Hudson Straight. Nunavik occupies 1/3 of Quebec’s surface area (approximately 660,000 square kilometres). Its coastline extends about 2,500 kilometres. In 2006, the Canadian government, the Nunavut Government, and the Inuit of Quebec signed the *Nunavik Inuit Land Claims Agreement* which came into effect in 2008. The land claim settlement area covers 14 Inuit communities. This agreement gave the Nunavik Inuit ownership to about 80 percent of the islands off the coast of Nunavik, including subsurface rights.

The Inuvialuit Settlement Region is located in the Western Arctic. The Inuvialuit retained title to 90,650 square kilometres of land - 13,000 square kilometres with full surface and subsurface title and 78,000 square kilometres excluding oil, gas and specified mineral rights. The claim settlement also included the offshore and the North Slope of the Yukon Territory over to Victoria Island. The agreement includes six communities.

Nunavut has an area of about 1.9 million square kilometers of land and water covering about 1/5 of Canada’s land mass. It extends from the 60th to 85th parallels and includes most of the Arctic Islands, and all of the islands in Hudson Bay, James Bay, and Ungava Bay. It is bounded by the Northwest
Territories to the west, and small portions of Quebec, Newfoundland, and Labrador to the east. Nunavut has three main regions: Kitikmeot, Kivalliq, and Qikiqtaaluk. The Inuit have title to 355,842 square kilometres of Nunavut, including 35,257 square kilometers of mineral rights. Inuit live in 26 communities that are connected only by air as there are no roads. When the 1993 Nunavut Land Claims Agreement was signed, this led to the creation of the Nunavut Territory in 1999. This agreement is the second largest land claim settlement negotiated between a state government and an Indigenous people in the world.

Nunatsiavut is located on the north coast of Labrador. This region was created in 2005 with the signing of the Labrador Inuit Land Claims Agreement. The agreement includes five major communities and those Labrador Inuit living outside these communities. The Labrador Inuit Settlement Area (LISA) covers about 72,500 square kilometers and most of Labrador’s coastline. Of this, the Inuit own 15,799 square kilometers of land and 48,690 square kilometers offshore. Although the Inuit did not receive subsurface rights in the LISA, the Nunatsiavut government shares in subsurface revenues.

3.1.2 Demographics

The discussion about Inuit demographics in the following paragraphs is based primarily on the 2006 Canadian census released by Statistics Canada.

Nunavik is home to 9,565 Inuit or 19 percent of Canada’s total Inuit population. It has about 11,000 permanent residents; nearly 90 percent of these are Inuit. Sixty per cent of Inuit in Nunavik are under 25 years of age (Statistics Canada, 2006b). The population has almost doubled since 1971 (Duhaime, 2008). Another 1395 Inuit live in Quebec but outside Nunavik. In comparison, about 1.5 percent of Quebec’s population self-identify as Aboriginal.

The Inuvialuit region has a population of 3,115 Inuit, with an additional 1,050 Inuit living in other regions of the Northwest Territories. This region has experienced a 3 percent decline in population since 1996. Inuit make up 55 percent of the population of the Inuvialuit region.
Nunavut has a population of 24,635 Inuit, which comprise 84 percent of its total population. Nunavut accounts for 49 percent of the Inuit population in Canada (Statistics Canada 2006b). Other than in Iqaluit (formerly Frobisher Bay), Rankin Inlet (Kangiqtinq) and Cambridge Bay (Ikaluktutiak), the Inuit form close to 95 percent of the population in other communities. The population of Nunavut increased 20 percent between 1996 and 2006.

Newfoundland and Labrador have a population of 4,715 Inuit. In comparison, about 4.7 percent of their population self-identify as Indigenous. Nunatsiavut has a population of 2,160 Inuit, and they represent 89 percent of the total population (Statistics Canada, 2006b). Unlike the situation with Nunavik and Nunavut, the population has decreased slightly by four percent (Fugmann, 2011, p. 58). The median age for the Aboriginal identity population in Nunatsiavut is 26 years; this is much higher than that of Nunavut at 19.6 (Fugmann, 2011, p. 59).

Outside of Nunangat, 17 per cent of Inuit live in urban areas and 5 percent live in rural areas (Statistics Canada, 2006b). The Inuit Tapiriit Kanatami (2008, p. 2) reported that on a national level, 76 percent of Inuit living outside their land claim settlement area live in the urban centres such as Montreal, Ottawa, Happy Valley-Goose Bay, North West River, and St. John’s.

A stark contrast exists between Inuit in Nunangat and non-Aboriginals in Canada. The 2006 Canadian census showed that the median income of Inuit in Nunangat was CAN$16,669 which was CAN$9,000 less than the median income reported by the non-Aboriginal population. To put this in perspective, the poverty line for a family of four in rural Canada was CAN$21,731 in 2006 (CCSDa, 2006). This income disparity is understated because the cost of living is significantly higher in Northern Canada.

Expenses for basic needs such as food, housing, clothing and harvesting supplies are much higher than in southern parts of Canada. For example, in most isolated northern communities, it may cost $350-$450 a week to provide a nutritious diet for a family of four, compared to about $200 in the South. In addition, the Canadian Arctic is unique in that it is “mixed” with both traditional and Inuit wage economies. The traditional economy contributes to Inuit communities through the harvesting of country food,
sewing of clothing and caring for community members (Statistics Canada, 2008, p. 5).

Inuit self-employment, at 3.0 percent, is less than half the 7.8 percent Canadian average for self-employment (Treasury Board Canada Secretariat, 2005). According to Statistics Canada (2008), the unemployment rate for Inuit adults of core working age was 19 per cent versus their non-Aboriginal counterparts at 5.2 per cent. Within Inuit Nunangat, the unemployment rate was 19.1 percent in Nunavut, 18.0 percent in Nunavik, and 33.6 percent in Nunatsiavut. A Conference Board of Canada study in 2002 for the Nunavut government suggested this unemployment rate is understated and if one considers the individuals who stopped looking because no jobs were available, the unemployment rate for Nunavut rose to 27.2 percent based on a labour force of 11,886 (Conference Board of Canada, 2002). So what are the impacts of these demographic issues for Inuit entrepreneurship, business and economic development?

The Pauktuuttit Inuit Women’s Association (PIWA) explained the problem to the 2004 United Nations Permanent Forum on Indigenous Issues. “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” (PIWA, 2004, p. 3). Mr. Jose A. Kusugak, past President of the Inuit Tapiriit Kanatami, also expressed similar concerns at the Aboriginal Roundtable on Aboriginal Issues (ITK, 2004).

Nunavut Member of Parliament for Canada, Nancy Karetak-Lindell indicated that 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).

Significant education and skills training will need to take place for the Inuit to benefit from the increased economic development and business activity. The
lower incomes of Inuit also result in reduced purchasing power and fewer savings for investments. The local demand for products is small. Therefore, businesses remain very small and in survival mode or are forced to search for external markets thus having lower profit margins because of much higher transportation costs.

The National Aboriginal Economic Development Board (NAEDB) in 2004 urged 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).

Donihee (2009, p. 12) at the CARC 2030 North Conference comments, “Although wildlife harvesting will continue to be an important aspect of aboriginal culture, it is not likely that many of these youths will be able to make a full-time living off the land.” As the rest of Canada has a rapidly aging demographic, Inuit youth will have opportunities to migrate out of Inuit Nunangat to major cities in southern Canada. However, this will require leaving their families and support systems. Definitely if the younger Inuit population remains, the pressure will increase for economic development to create jobs.

3.1.3 Political/Organisational Structures

This section will briefly discuss various Canadian Inuit political and organisational structures. It explains: 1) the key organisations formed to administer the land claims settlements – Makivik Corporation, Inuvialuit Regional Corporation, Nunavut Tunngavik Inc., and the Nunatsiavut Government; 2) the national Inuit bodies – The Inuit Tapiriit Kanatami and Pauktuutit Inuit Women’s Association; and 3) the International Inuit Circumpolar Council.
Makivik Corporation

Makivik Corporation was established in 1978 under the Province of Quebec’s Corporations Act. It protects the rights, interests, responsibilities and financial compensation of the Inuit Nunavik beneficiaries to the 1975 *James Bay and Northern Quebec Agreement* and to the recent offshore *Nunavik Inuit Land Claim Agreement* that came into effect in 2008. According to Makivik’s 2010 Annual Report, its mandate includes owning and operating large profitable business enterprises and generating jobs; social economic development, improved housing conditions, and protection of the Inuit language and culture and the natural environment. Corporate objectives include:

- to receive, administer, distribute and invest the compensation money payable to Nunavik Inuit, as provided for in the *James Bay and Northern Quebec Agreement*;
- to relieve poverty, to promote the welfare, advancement, and education of the Inuit;
- to foster, promote, protect and assist in preserving the Inuit way of life, values and traditions;
- to exercise the functions vested in it by other Acts or the Agreement; and
- to develop and improve the Inuit communities and to improve their means of actions (Makivik, 2011).

Inuvialuit Regional Corporation (IRC)

The Inuvialuit Regional Corporation (IRC) was formed in 1984 after the signing of the Inuvialuit Final Agreements to receive the lands and financial compensation obtained by the Inuvialuit. The corporation is responsible for managing the affairs of the settlement (Inuvialuit Corporate Group, 1997) These objectives are to: preserve the Inuvialuit culture, identity and preserve values within a changing northern society; enable Inuvialuit to be equal and meaningful participants in the northern and national economy and society; and protect and preserve the Arctic wildlife, environment and biological productivity. According to the IRC, its corporate goals include:
• the preservation and growth of the financial compensation flowing from the IFA
• the distribution of accumulated wealth to the beneficiaries
• the representation and advancement of Inuvialuit interests in areas of external relations including federal, territorial, and municipal governances, circumpolar and other aboriginal organisations, private sector and special interest groups
• the stewardship of Inuvialuit lands
• the identification and successful implementation of economic, social, cultural, educational, training and employment programs that benefit Inuvialuit
• the provision of technical and administrative support to community corporations and beneficiaries
• the promotion of rights and benefits accorded to Inuvialuit under the IFA (IRC, 2006).

Each Inuvialuit community has a community corporation with an elected board. The community corporation’s chairperson represents the community on IRC’s board.

**Nunavut Tunngavik Incorporated (NTI)**

The Nunavut Tunngavik Incorporated (NTI) is the not-for-profit birthright corporation established to ensure promises made under the Nunavut Land Claims Agreement are carried out. NTI’s objectives are “to safeguard, administer and advance the rights and benefits that belong to the Inuit of Nunavut as an aboriginal people, so as to promote their economic, social and cultural well-being through succeeding generations (NTI, 2010, p. 87).” NTI receives annual operating funds from the interest and income earned on the nearly CAN$1.1 billion in the Nunavut Trust. It redistributes these funds to 37 Inuit and wildlife organisations including the regional Inuit associations, Inuit development corporations, Inuit community development corporations, Inuit investment corporations, Inuit wildlife management boards and their secretariat and joint resource management boards (NTI, n.d.). Under the Land Claims
Settlement, each community has a Hunters and Trappers Organisation (HTO) that manages the harvesting of wildlife.

**Labrador Inuit Association (LIA)**

The Labrador Inuit Association (LIA) was formed in 1973 to promote Inuit culture and to advance the rights of Inuit people associated with their traditional lands. The LIA represents about 5,300 Inuit and Kablumangajuit (individuals of partial Inuit ancestry) living mostly in five Inuit coastal communities and the Upper Lake Melville area of Newfoundland and Labrador.

The LIA submitted a land claim on behalf of the Inuit people to the federal and provincial governments in 1977. In 1982, the LIA incorporated The Labrador Inuit Development Corporation (LIDC) as a wholly owned subsidiary for business and economic development projects. The LIA’s economic development projects have included commercial caribou harvesting and processing, aquatic harvesting and processing, forestry, transportation, construction, real estate and a mining.

After 30 years of negotiating, the Labrador Inuit Land Claim Agreement was signed, and the Nunatsiavut Government was formed in 2005. Under the agreement, the Government will transfer CAN$149 million to the Labrador Inuit as well as CAN$156 million for its implementation. The Newfoundland and Labrador government allocated CAN$1,324,600 in the 2006 Budget to fulfill its implementation obligations. Nunatsiavut is the first Inuit region in Canada to have self-government and sets a precedent. Nunatsiavut remains part of Newfoundland and Labrador. However, the Nunatsiavut Government has authority over many central governance areas including health, education and economic development, culture and language, justice, lands and resources, and community matters. Each Inuit community within the Labrador Inuit land claim settlement area has a community government. Inuit living outside this area have formed two non-profit Inuit community corporations to participate in the self-government (Nunatsiavut Government, 2011).
Inuit Tapiriit Kanatami (ITK)

The Inuit Tapiriit Kanatami (formerly the Inuit Tapirisat of Canada) (ITK), formed in 1971, is the national Inuit organisation in Canada. It represents the 55,000 Inuit living in 53 communities across the four Inuit regions. ITK is a national advocacy organisation that promotes, coordinates and represents Inuit concerns with regard to wide variety of environmental, social, cultural, and political, issues and challenges facing Inuit on the national level (ITK, 2011, website).

Pauktuutit Inuit Women’s Association (PIWA)

The Pauktuutit Inuit Women’s Association (PIWA), formed in 1984, is the national voice of Inuit women in 52 communities across Canada’s north. Pauktuutit advocates to ensure Inuit women’s input on national issues and to increase their participation in federal policies and programs. “Pauktuutit leads and supports Canadian Inuit women in policy development and community projects in all areas of interest to them, for the social, cultural, political and economic betterment of the women, their families and communities” (PIWA, 2011, website).

Inuit Circumpolar Council (ICC)

The Inuit Circumpolar Council (ICC), started in 1977, represents the interests of the 150,000 Inuit of Alaska, Canada, Greenland, and Chukotka (Russia). The ICC’s goals are: to strengthen unity among Inuit of the circumpolar region; promote Inuit rights and interests on an international level; develop and encourage long-term policies that safeguard the Arctic environment; and seek full and active partnership in the political, economic, and social development of circumpolar regions” (ICC, 2011, website). The ICC has advisory status to the United Nations. The ICC in Canada is a non-profit organisation led by a board of directors comprising the elected leaders of the four land-claims settlement regions. Each of the regions provides funding to support ICC (Canada)’s activities.
3.1.4 Contextual Literature for Each Canadian Site

3.1.4.1 Inuit of Rankin Inlet, Nunavut

The Hamlet of Rankin Inlet (Kangiqtining), the second largest community in Nunavut, has an area of 20.24 km\(^2\) (7.8 sq. mi.). It is located on the northwest edge of the Hudson’s Bay and is about 480 kilometres above the tree line. The nearest community in southern Canada is Churchill, Manitoba about 500 kilometers south.

The hamlet has a population of 2335 with 1925 identifying as Inuit and 60 identifying as a visible minority (2006 Statistics Canada Census). Major religions are Anglican, Catholic and Presbyterian. Inuktitut is the first language followed by English and French.

Nunavut has only had three operating mines. In 1928, iron ore was discovered near what is now Rankin Inlet and diamond mining also occurred in this area. In the 1950s, nickel deposits were found near Rankin Inlet. Increased use of nickel, coupled with the high prices of nickel during the Korean War prompted the establishment of Rankin Inlet Nickel Mines later changed to North Rankin Nickel Mines (NRNM). Inuit were not employed in the mine’s construction. However, when the mine started operating in 1956, the Inuit employees increased from 6 to 70 within one year. During NRNM’s operations, 70 percent of its miners were Inuit (Dailey and Dailey, 1961, p. 4).

In 1955, the town of Rankin Inlet was established at the head of the inlet. About 320 Inuit moved from Eskimo Point and Chesterfield (Hughes, 1965, p. 16). When the nickel mine closed in 1959, 107 Inuit were employed and earned about CAN$200 a month. Thus, the Inuit in Rankin Inlet and surrounding areas have experienced the boom and bust associated with mining. The abandoned machinery continues to serve as a visual reminder.

After the mine had closed, the government looked at alternative forms of economic development to address the unemployment. In the 1970s, the NWT government moved its regional centre from Churchill, Manitoba to Rankin Inlet. The government introduced agricultural projects for local food production to
provide employment and encourage import substitution. A chicken raising enterprise and pig farm were established in 1969. Both the poultry and pigs were fed left-over fish from the cannery. Initially, the NWT Development Corporation intended to help and develop the industrial business until it was fully viable then turn it over to private enterprise (GNWT, n.d., p. 22). Both projects were discontinued because the meat had fishy flavour and odour (GNWT, n.d., p. 11).

By the early 1970s, the Inuit in Rankin Inlet had moved from seven communities located all over Keewatin. Each community spoke a different dialect and represented different kinship groups (Jansen, 1979, p. 29). Several Inuit were self-employed entrepreneurs: the Coffee-Shop Taxi (which also had a pool hall and community radio); Kudlik Electric; Ski-Doo Repair Shop; a legal family corporation which held the municipal service contracts for heating oil delivery, water delivery, garbage and sewage disposal; Entertainment Concessions; and Peterhead Boat Rentals (for freight or transportation services) (Jansen, 1979). Inuit still seasonally hunted and trapped but did not follow the migration (Burch, et al., 1991). The subsistence harvest was combined with other employment to gain more income. People frequently shared caribou, other meat and fish as well as hunting and fishing equipment with kin and close friends. Enterprise hunters sold pelts to the Hudson’s Bay Company, the local Co-op, or the Moto-ski Shop (Jansen, 1979, pp. 7 and 43). The informal economy was also strong.

During the early 1990s, a local Inuit development group from Rankin Inlet invested in Northern Pork. Located in Hay River, NWT, this commercial operation produced pigs for pork (GNWT, n.d., p. 23).

The NWT government encouraged commercial fishing at Rankin Inlet in 1961 and the fish cannery opened in 1966 (Clarke, 1993, p. 219). Keewatin Meat and Fish was formed in October 1992 and operated facilities in Rankin Inlet and Cambridge Bay. The company was owned 100 percent by the Keewatin Development Corporation (now the Nunavut Development Corporation). The Rankin Inlet facility processed both arctic char and caribou in the old fish plant. The caribou meat supply came from local hunters in Rankin Inlet. The meat was
packaged, processed and sold across the NWT. Because the meat was sold within the NWT, Canadian food inspection was not required.

In 1995, Keewatin Meat and Fish as Arctic Foods Ltd. secured the contract to market all the caribou from the Southampton Island commercial harvest (Dragon 2002, p. 81). Of the 120,000 pounds of “streamlined carcasses”, 12.5 percent went to the meat plant in Rankin Inlet and the rest went to Tricon Commodities International in Edmonton (Junkin 2005, p. 209). Grandview Farms in Ontario (an abattoir that specialised in game meat) secured the marketing contract from 1996 – 1998 but the Rankin Inlet plant received as much caribou meat as it needed.

3.1.4.2 Inuit of Southampton Island, Nunavut

The Inuit of Salliq or Southampton Island have been referred to as the Sadlermiut (Merbs, 1983; Boas, 1908; Bird, 1953); Saglermiut (Comer, 1910); Sedlermiuts (Manning, 1936); and Sallirmiut (Park, 1993). The Inuit called them Tuniit. They also have inhabited nearby Coats and Walrus Islands. Descended from the Thule, they have developed as a regionally distinct group because of isolation (Park, 1993; Rowley, 1994). The Ross Welcome Sound between the island and the mainland is difficult to cross and rarely freezes firmly in winter. Also, Inuit on the mainland had well established major trade routes with more desirable goods on the south-west coast of Hudson Bay (Rowley, 1994; Cormer, 1910).

The Southampton Inuit first sighted a European explorer, Thomas Button, in 1604. They traded with European whalers in 1824, 1878, and 1879 (Merbs, 1983; Rowley, 1994). Over the years, they also traded caribou, baleen and fur with explorers, fur traders and whalers. They also traded with other Inuit settlements on the mainland and other islands (Boas, 1908).

In 1902, all but four Southampton Inuit perished from typhoid brought in by the Scottish Whaler Arctic (Ross, 1975, pp. 114-117). By 1923, Ukimmiuts (Okumiut) from nearby Coats Island had repopulated the island (Mathiassen, 1927; Moyer, 1971). They were originally from south Baffin Island.

Whaling came to an end in 1915. In 1916, William (Wilhelm) Duval, known among the Inuit as Sivutiksaq the Harpooner, joined the Arctic Gold Exploration
 Syndicate, a fur-trading enterprise. He and his family accompanied Henry Toke Munn (an owner) to Southampton Island for trade with the Inuit (Harper, 1985; Munn, 1919).

The Hudson’s Bay Company opened a post to trade fur and store goods in 1924 and closed its trading post on Coats Island (Hudson’s Bay Company Archives, n.d.). Inuit from other communities such as Repulse Bay, Chesterfield Inlet, Wager Bay, Lake Harbour, Baffin Island, and northern Quebec, settled around the trading post (Manning, 1936; Bennett, 1940; Dunning, 1962). Dunning (1962) reported that the Aivilik and Okumiut were in equal numbers on the island, but the clans maintained social separation and rarely intermarried.

When George Sutton visited Southampton Island in 1929 and 1930 studying the birds, two Aivilik Inuit accurately sketched the island’s coast (an area of nearly 20,000 square miles) (Carpenter, 1973, p. 10).

The Inuit on Southampton Island continued to eat a more traditional diet than Inuit on the mainland (Dr. Rabinowitch, 1936). Chewing leather to soften it for household goods wore their teeth down to the gum line, particularly in women. The doctor tried unsuccessfully to supply the Inuit with a mechanical leather softener. Rabinowitch (1936, p. 496) comments, “The discovery of a method that would soften the leather but not impair its waterproof or durable qualities would be well worth the effort.”

Manning (1936, p. 233) notes the local Inuit were largely dependent on the Hudson’s Bay post, “without rifles and ammunition they would starve, without tobacco and tea they are miserable.” When I returned to Coral Harbour in May 2009, I distributed the case I had written translated into Inuktitut. The Aiviit HTO said this was the first time they had ever seen what had been written about them and that this was incorrect – they have always been able to sustain their families.

In 1951, 238 Inuit lived on the island mostly around the trading post (Bird, 1953). The Canadian government had started a day school and permanent nursing station. In 1959, the federal government implemented the Northern Administration Program and appointed the first Northern Services Officer for
Coral Harbour. The federal government began transfer payments such as old-age pensions, family allowance benefits, welfare rations, and extra rations for people recovering from hospitalised illnesses. This extra family income also encouraged Inuit dependency and started the transition from the traditional to a mixed economy. Dunning (1962, p.164) states, “In addition, some occasional wage labour at the airfield, DEW line operation, construction and ship-cargo-handling have resulted in a total economic baseline which although minimal, at least superseded the absolute dependency on fox trapping for consumer goods income”.

Dunning (1962) provides insight into kinship and the gifting exchanges of trade goods during Inuit adoption of babies. Objects such as metal tools, rifles, accordions and other items were gifted in exchange. Dunning indicates the adoptions reinforced kinship, filled gaps within the extended family and demonstrated that a higher status male (such as a co-owner of the walrus hunting boats) could provide for more children.

Barren ground caribou (*Rangifer tarandus groenlandicus*) had died out by the 1950s. Women were no longer able to make clothing from caribou, and the wolves had also disappeared (Manning, 1942). Junkin (2005) suggests the depletion of caribou was a function of the booming fur pelt industry, increased use of dog teams for hunting and trapping thus requiring caribou meat for feed and the effectiveness of new technologies like rifles with scopes. Other authors suggest that the increased Inuit population combined with the hunting from the US air force base had contributed to the extinction of the caribou on Southampton Island.

Forty-eight caribou were reintroduced during 1967 by the GNWT (Heard & Ouellet, 1994). As these caribou did not migrate and had no known predators on Southampton Island, they were able to repopulate. The Inuit agreed not to hunt the caribou for 15 years to establish a solid herd. Each family could kill only one caribou until this occurred.

Access to credit for Inuit on Southampton Island was limited. The Hudson’s Bay Company was the only or major provider of credit (Moyer, 1971). For example,
the captain and his kin borrowed to acquire the peterhead or whaling boats, and then they traded fox skins to repay the debt. Cash earned through summer charters and visiting scientists helped to pay for the boat’s maintenance.

During the 1960s, the federal government organised a Community Association, which sponsored and organised the caribou hunt. In 1977-78, Coral Harbour hunters were given a subsistence quota of 25 caribou. This quota was increased to 400 caribou (300 males and 100 females) per year in 1990-91 (Heard & Ouellet, 1994, p. 93). In 1992, Inuit in Coral Harbour were allowed unlimited hunting.

In 1994, the large commercial harvest was piloted for herd population control not economic development. Christie and Fareeze (1995) report that Coral Harbour had considered about fifteen different economic development opportunities before choosing to develop the commercial caribou harvest. Junkin (2005, p. 205) reports the first commercial quota was 250 in 1992, increasing to 1000 in 1993, 5000 in 1994 and 6000 in 1997.

According to the Nunavut Wildlife Harvest Study (Nunavut Wildlife Management Board, 2004) for the five-year period - June 1996 to May 2001, Coral Harbour reported the mean annual subsistence harvest of caribou was 1,470 with 165 hunters. Coral Harbour had 283 registered hunters over the five-year period 2001 – 2006. Of these, 28 were intensive (regularly providing country food in the household), 104 were active (short but intensive hunting in regular but limited number of harvesting activities); and 94 were occasional (day-trips or weekend outings for occasional hunting activities). Caribou were reported as somewhat available.

Dragon (2002) and Junkin (2005) review the development of commercial caribou harvesting on Southampton Island and the processing partnership with Kivalliq Arctic Foods. Meis Mason et al. (2004) describes the changes Kivalliq Arctic Foods undertook to transition from territorial to national and international markets. KAF upgraded the processing, implemented HACCP, worked with the Manitoba Food Institute to refine the product, and developed new markets. Caribou meat from Southampton Island is processed in Rankin Inlet to make
products for the high-end, niche market in Canada, US and Europe. Working through distributors, restaurants order denver hinds, tenderloins, and french rib racks in small serving quantities.

3.1.4.3 Inuit of Nunavik, Quebec

The Nunavimmiut, the Inuit of Nunavik, have occupied these lands for more than 4000 years. They were nomadic travelling as far as the Labrador Coast to fish and to hunt seal, walrus, and polar bear. The whalers, missionaries, and fur traders did not arrive until after the 1800s. The Hudson’s Bay Company had been granted land rights to Rupert’s Land by the British Crown. In 1870, the company sold the land to the Canadian government. Initially, this land was known as the Northwest Territories and spanned Manitoba, Saskatchewan, Alberta and parts of Ontario and Quebec. The Quebec portion of the Inuit homeland was annexed to Quebec in 1898 and 1912.

Nunavik has 14 communities located along the shores of the Hudson Bay, Hudson Strait and Ungava Bay. No roads connect the communities with each other or with southern Canada. They depend on air service provided by Air Inuit (wholly-owned by Makivik Corporation) year around, snowmobile, and sea service during the summer.

Each community is organised as a municipal council and is a legal Northern Village Corporation. Each Northern Village Corporation is a member of the Kavik Regional Development Council Regional Government (KRG). The KRG was formed in 1978 at the same time as the jurisdiction of Nunavik. KRG is the administrative body for the 8,775 Inuit. The Inuit do not have a special legal status – they pay taxes and abide by the same laws as other people living in Quebec.

According to a funding proposal of Makivik Corporation (1985) to the Native Economic Development Program, it had developed an Economic Development Strategy for the region and individual communities in 1984. Makivik notes (1985, p. 24), other than the Inuit Hunter Support Program, no new economic and social programs had been created, although Canada and Quebec were required under section 29.0.39 of the JBNQA to support Inuit entrepreneurs by providing technical and professional advice and financial services.
The commercial use of caribou was not part of the original JBNQA signed in 1975. Makivik continued negotiating with the Canadian and Quebec governments. In 1993, the JBNQA was amended to provide Inuit with the right to commercially hunt and process caribou and to sell caribou products. All Inuit needs have to be met first, and commercial quotas are set by the Hunting, Fishing and Trapping Coordinating Committee. Until 2004, only Inuit beneficiaries under the Agreement could commercially harvest caribou for export sales outside the region. Gombay (2005, p. 7) comments that this ensured “southern businesses did not move in and profit from northern resources and retain the profits in the South.”

Under the Makivik Inter-Community Trade Project (Makivik, n.d.), Nunavik Arctic Foods (NAF) was established as a subsidiary in 1994 to specialise in the production and distribution of a variety of caribou products. NAF invested more than CAN$4.5 million in building and operating four commercial slaughterhouses in Nunavik. The caribou were hunted in traditional Inuit ways and then brought to the processing plants. Because these facilities only had provincial certification, NAF caribou products could be sold only in Quebec. Nunavik had intended that the commercial caribou harvest and processing plants would provide employment for local Inuit as well as healthy country food at lower prices for local consumption. NAF employed about 100 Inuit, about half of them hunters. Lamey (1995, p. F1) reports, “Underemployment is a constant concern in the north, 60 percent of the population is under the age of 30. The food processing venture has given young workers a sense of purpose while allowing older hunters to pursue their traditional way of life.” Makivik traditionally hunts the animals in their wild state and does not use pens or corrals (Farnsworth, 1995).

To assist with market development, NAF had a world-renowned chef develop recipes and cooking techniques for the Quebec Inuit products (Burkhard, 1995; Farnsworth, 1995). French and American chefs sampled the caribou food products and thought they had commercial merit if prepared using marinades and sauces (Farnsworth, 1995).
NAF’s commercial quota was cut in 1996 from 1,800 to 900 caribou because of complaints about waste disposal and overharvesting of large bull caribou (George, 1996, Nov. 15). By 1998, NAF was having financial problems and needed to sell 150,000 kilos of caribou to break even (George, 1998, April 12). NAF closed four caribou processing plants because of increased transportation costs (Makivik Corporation Annual Report, 1998). The caribou herd had changed its migration patterns away from the four Inuit communities. Air freight costs had also increased. In 1999, NAF reported a loss of CAN $1 million and in 2001, they harvested no caribou (Makivik Corporation Annual Reports, 1998-1999 and 1999-2000).

The Kativik Regional Development Council (1998a and 1998b) recommended that the Quebec government needed to develop a strategy for the commercialisation of caribou and establish a funding program to develop this sector similar to Northern Europe’s experience. Furthermore, they needed to create new businesses, continue promoting northern foods, and search for new markets.

Makivik developed a Fur Harvesting, Clothing and Access Initiative which purchased harvested furs and clothing from Inuit for resale to other Inuit in the Nunavik Region (Makivik, 2009). The company distributes furs to Inuit at home or community sewing centres to make traditional parkas, caribou pants, mittens and boots. Makivik (2009, p. 74) indicates this initiative had “lead to an appreciable increase in the quantity and quality of fur and clothing production in Nunavik” over the six years.

3.1.4.4 Inuit of Inukjuak, Nunavik

The northern village of Inukjuak, Nunavik has been called Port Harrison, Inoucdjouac, Inuksuak, or Kongoak (Hudson’s Bay Company Archives). It is located at latitude 58 degrees 27’ N at Cape Dufferin, at the north mouth of the Innuksuac River. The name historically means “in this place lived many Inuit”. The Hopewell Islands are located to its west.

With a population of 1369, this is the second largest Inuit community in Nunavik. It is an important cultural centre for the Inuit. Not many non-Inuit (Qallunaat) live there. Inukjuak, with no road access, is connected by daily flights. A one-way
flight from Montreal costs CAN$2776 (with tax). Ships can dock for about six weeks each year when the ice is out of the harbour. The land is generally treeless and has a lot of permafrost.

The Inuit from this area began journeying south to trade with the Hudson’s Bay Company in 1749 at Great Whale River. Trading posts were established at Inukjuac in 1909 by the Re vilion Frères; in 1920 by the Hudson’s Bay Company; and in 1939 by the Baffin Trading Company. During the depression of the 1930s, the Canadian government encouraged the Inuit to begin carving models and jewelry as a source of income (Canadian Guild of Crafts, 1980).

The Inuit continued to live in poverty after the war as fur pelts were worth little and the trading posts were poorly stocked (Graburn, 2004). By 1950, HBC had bought out its competitors. In 1952, the fur market collapsed. With food supplies dwindling, the RCMP operated government trading stores during the 1950s. In 1951, the federal government school was opened, and teaching was done only in English.

In 1956, the caribou herd on the western Hudson Bay was in a critical state with only about 250 caribou (Banfield & Tener, 1958, p. 571). Inuit hunting parties from Inukjuak travelled 100 to 300 miles by dog team and returned 3 to 6 weeks later with no caribou, only hides. All the caribou meat was used to feed the dogs and the hunters. The caribou had changed their migration route. Couturier and Otto (2006) commented that both the George River caribou herd and the Leaf River Herd could migrate as far to the northwest of Quebec as Inukjuak.

Smith (1991) indicates that Inuit in Inukjuak gathered over 200 plant species. Caribou and two fox species were important mammals. Caribou, which were harvested for about four months of the year, provided about 40 percent of the edible calories (Smith, p. 182).

Inuit commercial caribou harvesting and processing was performed in Inukjuak for one year by Ipushin Ltd. (Ministère des Ressources Naturelles Et De La Faune Secteur Faune Québec, 2010). The Inuit had used Sámi reindeer herding techniques to gather and herd the caribou to their commercial processing.
operation (Lowi, 1997). George (1996) discusses the partners, their intended products and market, and the investments made by different government agencies.

3.1.4.5 The Inuit of Nunatsiavut, Labrador

From 1774 to 1808, the Labrador coast was ruled by Quebec. From 1808 to 1949, the Labrador coast belonged to Newfoundland. In 1949, Newfoundland and Labrador joined the rest of Canada in confederation.

The Labrador Inuit are coastal people noted for fishing and seal hunting. They are distinct from the Innu, an inland First Nations people, who depended on caribou. Although both Innu and Inuit migrated, the Innu moved back and forth between Quebec and Labrador. The Inuit in some areas traded with the Innu to obtain caribou.

Labrador Inuit contact with Europeans began with explorers, fishing fleets and traders in the 1500s (Hessel, 1998). Between 1771 and 1830, German Moravian missionaries established four missions in lands traditionally used and occupied by the Inuit. Inuit hunting capabilities provided food for the missions and generated income for the missions as the Moravians sent furs, dried fish, seal oil, ivory and salt back to Europe (Arendt, 2010). Kleivan (1966, p. 82) comments that the Inuit traded “reindeer [caribou] meat, small game, eggs and berries, etc.” with the Moravian missionaries and received “knives, fishhooks, and lines but not rifles” (p. 48). The missionaries provided nets and encouraged the Inuit to fish for cod. Hiller (1971, p. 85) indicates that the Moravian missionaries “would neither give nor receive presents, and, in particular, refused to give away food except in times of severe shortage. The missionaries insisted the Eskimos [Inuit] pay them for services or goods rendered, and always paid Eskimos [Inuit] for jobs done for the missions.”

The Hudson’s Bay Company opened trading posts on the east coast of Labrador in the 1830s. It then slowly moved north. The HBC gave credit and distributed fishing, hunting and trapping equipment to the better Inuit hunters (Kleivan, 1966, p. 129). Later the HBC took over responsibility for the Moravian trade. The HBC no longer provided assistance when food was in short supply.
Therefore, the Inuit and their families spent more time on the land hunting furs the HBC valued.

Hawkes (1916) reported that the Labrador Inuit ate several species of seal complemented by caribou. The Inuit year was divided into months mostly named after seal activities however “numalialut” was the “inland month,” i.e., the month they go into the interior for deer (Hawkes, 1916, p. 29). The reindeer hunt was the most significant event of the year for the Inuit (Hutton, p. 240). Hutton (1912) and Hawkes (1916) described many traditional uses Labrador Inuit had for caribou.

Dr. Grenfell (1910, 1911, and 1919) initially tried to tame caribou but failed. With the aid of investors, he purchased over 300 reindeer from Norway and brought over three Sámi herders to establish a commercial reindeer industry in Canada. This venture failed as the reindeer went wild and mingled with the caribou.

Prior to 1958, the Newfoundland Wildlife Divisions did not have hunting quotas or licenses to manage caribou in Labrador (Bergerud, 1967). The Inuit used dog teams, snowmobiles with toboggans, and aircraft to reach the two herds. By the mid-1990s, Labrador Inuit were harvesting about 10,000 – 15,000 caribou from the George River herd annually (INCO, 1997, Chapter 12, p. 7).

To build on traditional and cultural lifestyles, the LIDC sponsored a small commercial hunt of the George River caribou herd in 1985 near Nain. They sold the meat only in Labrador and Newfoundland. The LIDC received a federal-provincial grant of CAN$90,000 to test the feasibility of commercial hunting and marketing the caribou province-wide through supermarkets. The frozen processed caribou from Nain was sent to Happy Valley-Goose Bay for coastal boat shipment throughout Labrador. They advertised and promoted the use of caribou meat for a diet high in protein yet low in fat and cholesterol. The LIDC anticipated the commercial harvest would provide 20 jobs in Nain and the construction of a CAN$2.2 million freezer and slaughterhouse. Yaffe (1985, A.8) quotes Sadie Popavitch-Penny, executive director of the LIDC, “A major obstacle is that federal standards require herding of the caribou for health inspection before slaughter, which is inconsistent with Inuit hunting practices.” The lack of freezer and processing space limited the size of the hunt. Therefore,
LIA built a large facility in 1987 in Nain to process and package the caribou meat for sale within the province (Hall, 1990, p. 2).

According to a report from Atlantic Canada Opportunities Agency and the Canadian Institute for Research and Regional Development (2003), this project was successful. The project provided more than 100 jobs associated with the commercial hunt, processing facility, and the use of the skins and other by-products for crafts and local cottage industry. A local Inuk had been trained and certified as the first and only meat inspector for the Canadian Food Inspection Agency service in Labrador. After a few years, all the enterprises discontinued because of changing caribou migration patterns, ice damage to the facility’s foundations, and increasing currency exchange and transportation costs.

Inuit women in Labrador have a long history of craft production. They produce moccasins, boots, parkas and other clothing items from sealskin and caribou hide for the whole household (Szala-Meneok & McIntosh, 1996). Inuit women supplement the family’s income by selling finished items to craft stores and retail galleries as well as by giving these as gifts instead of expensive items. Several barriers to the craft industry are: 1) shortages of raw materials, 2) difficulties of matching seasonal production with the demand cycle, 3) realistically costing the products, product development and design, 4) lack of communication and contact, 5) isolation of the communities, 6) social and cultural barriers toward women’s work, entrepreneurial participation and innovation, and 7) economic barriers from the Employment Insurance Benefits and Industrial Adjustment Strategies which discourage self-employment (Szala-Meneok & McIntosh, 1996).

Whitford Environment Ltd. (2003, p. 47) note that no records have been kept for the subsistence harvest of caribou by Aboriginal peoples. Natcher, Felt, McDonald, Procter and the Nunatsiavut Government (2007) examined the non-commercial or subsistence use of country foods by Inuit in several Inuit communities in Nunatsiavut, Labrador. The total subsistence harvest for 2006-2007 was 1,344 caribou. Using Usher’s edible food weight of 56.70 kg/animal, I calculated this equaled a total edible food weight of 76,205 kg of caribou (see
Using a store bought beef price of CAN$9.47 per kg., the caribou subsistence harvest replaced $721,661 in imported southern beef costs. The Labrador Inuit informants reported harvesting, processing, distributing and consuming the caribou meat. The social networks were reinforced by linking individuals, households and communities as the hunting families continued to give and receive caribou. Importantly, the wages earned by other family members were used to support harvesting activities of family members.

The George River Herd migrates annually to its breeding grounds in the Torngat Mountain Range. In 2005, the Government of Canada signed the Torngat Mountains National Park Reserve Land Transfer Agreement with the Labrador Inuit Association. In exchange for the Labrador Inuit giving up 3000 square miles, Parks Canada agreed to transfer CAN$14 million over the first ten years. The new park recognises and honours “Inuit knowledge and the special historical and cultural relationship between Inuit and the land […]” (Labrador Inuit Association, 2005, p. 34).

Davies (2007) reports that the Inuit were worried the Voisey’s Bay Mine was contaminating fish and caribou. Inuit said the tastes, textures and appearances of caribou had changed thus making it harder to use. With more Inuit in paid employment connected to the mine, the work schedules had reduced the time available for Inuit to hunt caribou. Davies also comments that climate change had affected the depth and quality of the ice as well as the predictability of the weather. Therefore, Inuit were finding it harder to reach the caribou.

**Future Economic Development**

The Labrador Inuit held their first economic conference in April 2005. The LIA organised the *Economic Conference: Foundations for Success with Nunatsiavut* to plan their economic development. According to William Andersen III, President of the LIA (LIA, 2005, pp. 6-7), “Economic and social developments go hand in hand […]. We are challenged to look at how we manage our employment and business investments, and how we balance our social and economic objectives.” The conference examined existing businesses of the LIDC and possibilities offered by fishery, forestry, tourism, and mining. The
LIA discussed the benefits and impacts of the Voisey’s Bay Mine and indicated 30 per cent of permanent staff were Inuit.

In 2002, the Central Labrador Economic Development Board offered a wild crafting of non-timber forest products workshop. Its purpose was “to encourage use of wasted animal bi-products from the subsistence hunt, not to increase the hunt for craft production” (Best, 2002, p. 2). At that time, Labrador had no commercial producers of buttons made from caribou antler or bone and these products were imported from other provinces. The workshop topics included creating buttons from bone and antler, tufting caribou and moose hair, marketing and international trade. Representatives from Industry Trade and Rural Development explained the process of acquiring permits to process animal parts in craft products. The Department of Wildlife discussed the various permits required to collect “road kill” or shed antler, to purchase antler from subsistence hunters, or to sell antler or other animal bi-products. Labrador and Aboriginal Affairs addressed the regulations imposed by Aboriginal self-governments and land claim settlements. The lunch menu featured smoked char and caribou sausage processed by Uncle Sam’s Butcher Shop (Best, 2002).

In Section 2, I have discussed the Canadian Inuit in the context of the geography, demographic profile, caribou use, political and organisational structures. I concluded this section by introducing the literature related to each community in which the field research was conducted.
3.2 **Swedish Sámi - the Comparison**

Section 3.2 discusses the context of Swedish Sámi reindeer herding and processing. Following a similar pattern to Section 3.1, I first discuss the Sámi as Indigenous people and in particular Swedish Sámi as an Indigenous people and describe the geography of Swedish Sámi reindeer herding. This is followed by a demographic profile of Sámi reindeer herders. I then focus on Swedish Sámi reindeer husbandry and new enterprises. I conclude with a brief description of selected political and organisational structures.

3.2.1 **The Sámi as an Indigenous People**

Historically the Sámi were regarded as an ethnic minority, but they are now recognised by the United Nations and the Swedish government as Indigenous people. In January, 2011, the revised Swedish Constitution recognised the Sámi as a people, not a minority (United Nations, 2011). Sámi are the only officially recognised Indigenous people in the European Union.

The Sámi call their homeland Sápmi (commonly known as Lapland). The Sámi homeland extends across the Far North of Russia (Kola Peninsula), Finland (Lapland), Northern and Middle Norway (Finnmark, Nordland and Troms), and Sweden. The total number of Sámi is estimated between 50,000 to 75,000 of which 15,000 to 20,000 live in Sweden; 30,000 to 50,000 in Norway; 4,000 to 5,000 in Finland and around 2,000 in Russia (Pettersson, 2003, p. 18).

The Sámi Council is a non-government organisation (NGO) representing the Sámi people. It says that Indigenous peoples like the Sámi have rights that are distinct from the rights of minorities (Lawrence, 2005). According to the Sámi Council, the Sámi people are “one people, and state borders shall not divide our people’s unity.” The legal and political recognition of these rights varies among the northern countries (Riseth, 2005). The *Swedish Sámi Act 1992* defines a Sámi as: “Anyone who considers himself to be Sámi and (1) can confirm that he or she has had Sámi as a home language, or (2) can confirm that one of his parents or grandparents have or have had Sámi as a home language, or (3) has a parent who is or has been eligible for the Sámi Parliament” (Sámi Parliament, 2007).
When determining Sámi ethnicity, an important criterion is the use of a Sámi language. In the 1900s, Sweden banned the use of the Sámi language in schools and at home. Residential schools were introduced, and all Sámi children had to attend these (Kuokkanen, 2003). Teaching materials only became available in Sámi after 1953 and Sámi instruction was made available to Sámi in 1963 (Gaski, n.d.). Today about 6,000 Sámi speak their mother language (Swedish Institute, 2006).

3.2.2 Geographic Description

As discussed previously, Sámi reindeer herders are spread across Fennoscandia in Sweden, Norway, and Finland. Sámi relocation has occurred several times as a result of changing national borders. The border between Norway and Sweden-Finland was established in 1751. As a result of conflicts between Russia and Norway during the 1800s, the border between Norway and Finland was closed and almost 300 Norwegian Sámi with 20,000 reindeer moved to Karesuando in Northern Sweden (Axelsson & Sköld, 2006). In the Reindeer Grazing Convention of 1919 between Sweden and Norway, large acreages of pasture land in Norway that the Swedish Sámi in northern Norrbotten had used for grazing were closed (Lantto & Mörkenstam, 2008).

The number of reindeer has fluctuated around 250,000 in the last five years. Reindeer herding is practised on 52 percent of Sweden’s surface. Until 2007, the Swedish Department of Agriculture determined the total number of reindeer allowed in Sweden and the county administrative boards determined the number of reindeer each _sameby_ could own (see sec. 3.2.5). Using national statistics, Labba and Jernsletten (2004, pp. 131-132) report that the county of Norrbotten has 86 percent of the reindeer owners but only about 56 percent of the reindeer; Västerbotten has only 7 percent of the reindeer owners but 24 percent of the reindeer; and Jämtland has only 7 percent of the reindeer owners but 20 percent of the reindeer. Reindeer herding is also conducted in Västernorrland, Dalarna and Gävleborg (Sámiskt, 2006a). About 2000 Sámi live in southern Sweden, but only about 500 Sámi still herd reindeer. Their homesteads are scattered and their reindeer graze on property owned by the state or by Swedish farmers.
I chose to focus the comparative research in Norrbotten, Sweden because it had the largest percentage of Sámi reindeer owners and reindeer and the SSRHA recommended the Jokkmokk area as remote and focused on reindeer herding.

3.2.3 Demographics

The total number of Sámi living in Sweden is officially estimated at 20,000. Hassler et al. (2004) suggest this number is between 40,000 to 50,000 when calculated from various registers such as the Sámi Parliament electoral register, depending on the way Sámi identity is defined. However, Hassler (2005) using genealogical records, suggests the number of Sámi is closer to 60,000.

Some of the difficulties in identifying Sámi arise from how the Swedish census has been conducted. The census of 1910 used surnames to delineate Sámi origin. For the 1920 census, the Swedish government deemed that all children from a mixed marriage should be registered following the ethnicity of the father (Axelsson & Sköld, 2006). Thus, if a Swedish man married a Sámi woman, their son was classified as Swedish. However, the practice of enumerating Sámi separately in the Swedish Census stopped in 1945 at the end of World War II (Axelsson, 2010).

Around 10 percent of Sámi in Sweden are employed in reindeer husbandry. Other traditional occupations include hunting, fishing, gathering and handicrafts. More recent professions include tourism, media, art and music. Sweden has approximately 4,500 reindeer owners. Many of these also work part-time in the majority community.

Very few Sámi are unemployed. Omma, Holmgren and Jacobsson (2011, p.16) in a 2008 study of 516 young Sámi aged 18–28 years found: “62 percent were working, the majority in full-time jobs, 33 percent were studying, 1.9 percent were unemployed or on sick leave, and 2.3 percent were receiving government subsidies to stimulate employment.”

Male Sámi reindeer herders have much lower income levels than male Sámi non-reindeer herders - 130,000 SEK per year (CAN$20,319) as compared to 200,000 SEK (CAN$31,200) (Sjölander, Hassler, & Janlert, 2008, p. 85). This
was considerably lower than for the matched Swedish control population and the entire Swedish population (Hassler, 2005).

The income of Sámi women was quite similar to that of non-Sámi women in Sweden. The net income of Sámi reindeer herding women has increased significantly, and they take home much more money than their male counterparts (Hassler, 2005). The higher income is likely because more women have become employed outside reindeer herding.

Unlike the situation with the Canadian Inuit women, the Sámi reindeer herding women had similar education levels with the Sámi non-reindeer herding women, and the demographically matched cohort of women and women in the Swedish population (Hassler, 2005). The proportion of reindeer herding Sámi men was significantly different from men of the other groups at all educational levels, i.e., a lower frequency of high- and mid-level of education, and considerably higher frequency of basic education (Hassler, 2005).

The Sámi were as healthy as the Swedish population, which indicates that they no longer can be characterised as vulnerable in a demographic context (Hassler, 2005).

3.2.4 Political/Organisation Structure

The Sámi Parliament

According to Sámiskt (2009), the Sámi Parliament was established in 1993 by the Swedish Government to protect Sámi culture. In 2007, its powers were expanded to include responsibility for the central administration of the reindeer industry that previously had been under the Swedish Board of Agriculture and the County Administrative Boards. The Sámi elect their representatives to meet three times per year in a Sámi plenary assembly. The Sámi Parliament is not a self-governing body. It is funded by the Swedish government under the Ministry of Agriculture, Food and Consumer Affairs.
The Saami Council

The Swedish Sámi are members of the Saami Council. Founded in 1956, the Saami Council is a non-government organisation formed by Sámi member organisations from Finland, Russia, Norway and Sweden. The organisation originally started as the Nordic Council (with Finland, Norway, and Sweden) but changed its name when Russia was added in 1956. The Saami Council promotes and maintains Sámi economic, social, language, and cultural rights and interests. It also preserves and develops a collective Sámi identity aimed at attaining nationhood. The Council renders policy suggestions by developing opinions and proposals and responding to policy issues (Saami Council, n.d.).

3.2.5 Swedish Sámi Reindeer Husbandry and Enterprise

The Sámi culture has a strong association with the land and Sámi have traditionally owned and herded reindeer. Their foods from edible mammals included wild reindeer, elk (moose), bear, beaver, fisher, squirrels, hare, wolverine, lynx, marten, and marine animals such as seals, beluga whale, and walrus.

The economy of the Sámi changed from food-extraction to food-production between 900 (Storli, 1993) or 1500 (Lauf, 1917; Vorren, 1960) when the Sámi domesticated whole reindeer herds and started to migrate with them throughout the year (Kuoljok et al., 1991). This latter history can be divided into three stages 1) fully nomadic with subsistence use of all reindeer parts, 2) meat and market focused adaptation, and 3) regulated, market-oriented industry using motorised transport (Riseth, 2006).

Reindeer herding is the day-to-day work of managing the herd and its pastures; whereas reindeer husbandry occurs when the reindeer is a harvestable resource that is owned as a capital asset (Stammler, 2005). Signs of ownership include fur marks (where a knife cuts the reindeer hair in a particular pattern) and ear marks (where the ear is cut and notched in a particular pattern). These ownership marks are registered and recorded in a Sámi book.
Sweden’s reindeer industry has about 950 reindeer husbandry units. A husbandry unit is an economic association managed by a reindeer owner and his/her household family. In Sweden, every reindeer herder is considered a self-employed person. Reindeer herders must be members of a Sámi community (called a sameby). A sameby is not a village or settlement. It is a legal organisation that manages reindeer herding in a geographic area. The lands are divided for summer, spring/autumn, and winter grazing. It is both an economic and administrative body. The sameby administers all Sámi rights concerning hunting, fishing, and forest use. A single sameby has several different reindeer herding companies that may have one or more owners (Sámiskt, 2006a).

Sweden has 51 sameby. The Swedish government has determined that the Sámi reindeer herders, hunters, and fishermen cannot own the land. The land remains government property, and the Sámi pay taxes for the use of the area (Kuoljok et al., 1993, p. 40). Under the existing Swedish legislation, the sameby is only allowed to be involved in reindeer herding and not in any other economic activities (such as tourism). New legislation has been proposed which would allow the sameby other opportunities for economic development.

Entrepreneurial forms of these Sámi businesses included self-employment, family-based enterprises, cooperatives and community-based enterprises (Stammler, 2005; Heikkinen, 2006). Hukkinen (2006) discusses reindeer herding as a continuum of entrepreneurial options from an occupation or economic activity of a private enterprise to a traditional livelihood or way of life and culture. As an occupation, Hukkinen (2006, p. 717) states that it would be, “a full-time and mono professional reindeer enterprise, whose […] success should be assessed on the basis of measurable money flows within this separate economic activity alone. Local total or ‘cross-flow’ benefits, economic networking or other more subtle and cumulative economic effects should not be taken into account.” Hukkinen explained interconnected income streams would be ignored such as growing feed hay, agricultural subsidies, inherited or shared equipment, using reindeer for tourism, and selling skins, antlers and handicrafts. Hukkinen went on to state, “Entrepreneurship is not seen as maintenance of a way of life or culture, or development of the local economy as a holistic-interrelated system.” This
narrow view of reindeer herding was seen as less adaptable, more vulnerable, ecologically and economically less sustainable, and a poor fit with the social context of reindeer herding.

Kräik (2002) suggests that reindeer herding is gendered as men lead the majority of enterprises, and the largest herd owners are men. She notes that only 12 percent of reindeer herding companies have a woman business leader.

Close to 80 percent of all reindeer in Sweden and Finland are slaughtered in establishments owned by the reindeer herders (Reinert, 2006, p. 527). Reindeer owners sell the live reindeer to the processing companies and transport the animals directly from the separation corrals to the slaughterhouses in trucks (Labba and Jernsletten, 2004; Myrvoll, 2004, Oskar, 2009). This approach is different from in Norway where the government requires the slaughter to occur in an approved establishment, most of which are non-Sámi controlled.

Processing by-products include skins, mature antlers, and intestinal linings. Small meat processors also use the blood, liver, heart, marrow, and bones.

Membership in the EU has altered traditional direct sales of reindeer meat. As the EU only allows direct sales on a small scale and to firsthand consumers, expensive modern slaughterhouses are required to sell to middlemen like restaurants and grocery stores (Heinkken, 2006). For example, the bulk of reindeer meat in Kiruna, northern Sweden was sold locally to stores and fast food restaurants (Labba & Jernsletten, 2004).

Consumers now want reindeer meat appropriately processed and chopped into ready meal portions. Product upgrades include frozen and smoked products, custom specialty cuts, and boxes of assorted meats (Heinkken, 2006).

Sámi reindeer herding and its associated businesses face challenges from modernisation, globalisation and mechanisation (Forbes, 2005; Stammler, 2005; Heikkinen, 2006; Dana, 2007). Jääskö (1999, pp. 37-38) observes:

The commercialisation and centralisation of meat processing (including slaughtering) causes a decrease in numbers of people practicing a reindeer economy as well as a decrease in opportunities for other local
people to benefit from raw materials from reindeer. Not only does it result in reduction of jobs, but an impoverishment of the culture as well.

Changes have occurred in reindeer herding with new technologies such as the snowmobile, helicopter, computers, internet and GPS. Commercialisation and centralisation of meat processing have decreased the number of Sámi reindeer herders. The number of reindeer herders has also decreased as a result of retirements, fewer new entrants, and increased reindeer herd size.

Reindeer herding costs have increased because the amount and quality of pastures have declined, and supplemental feeding is necessary (Hukkinen et al., 2006). Increased competition is occurring from the market substitution of cheaper Russian reindeer meat, and New Zealand farmed deer (venison). Sámi income levels from reindeer herding have declined, and more women are working outside the home to support the family (Dana & Riseth, 2011; Kuokkanen, 2006; Nikolova, 2007; Riseth, 2006).

Sámi women in reindeer herding families are experiencing increases in demands and multipolicy of roles (Anderson, 1978). With children in schools ten months of the year, Sámi women must remain in the communities to raise the children. Summers are very busy as they move to the summer residence with the reindeer migration. Sámi women are involved in both reindeer herding and husbandry. However, they also engage in cottage industry handicraft production, selling tourist souvenirs, and gathering natural products for sale and use as inputs. Anderson commented that many of these new products did not have any traditional or utilitarian value.

Hydropower, forestry, and mining combined with large-scale nature conservation projects and climate change are reducing the available lands for reindeer grazing and interrupting traditional reindeer migration routes (Furberg, Evenga & Nilsson, 2011; Herrmann et al., 2014; Müller & Huuva, 2009).

Sámi culture has a strong impact on Sámi entrepreneurial processes and adaptation to markets (Rønning, 2007). The sale of Sámi handicrafts is an important source of income (Müller and Pettersson, 2001; Smith, 1996a). Sunna (2006) comments, *duodji are* “the handicrafts and artistic handicraft made by the
Sámi, based on Sámi traditions, Sámi design, Sámi pattern and colours. The word *duodji* relates first of all to the handicraft itself and in second place to the Sámi way of life.” Traditional Sámi handicraft uses the horn (antler), bone, wood, birch bark, grasses and roots, pewter, leather, thread and fabrics. Both Sámi herding and non-herding families see the production of handicrafts as a means of connecting to their traditional roots (Wheelersburg, 2008).

According to Joks (2007), *duodji* (Sámi handicrafts) are also part of reindeer husbandry but these are portrayed as separate industries and men’s work is more publicly displayed. Joks states, “A correct image of the reindeer husbandry economy depends on making all these activities visible (p. 251).”

The Swedish government has extensively promoted and marketed Sámi tourism as well as nature-based and wilderness tourism. Tourist operators have also promoted the negative effects of climate change as a means to encourage visits to Europe’s last wilderness. From 2000-2008, the number of overnight stays in registered accommodation units in Norrbotten increased from 1,614,000 to 2,051,000 and in Vasterbotten from 1,272,000 to 1,500,000 (Hall and Saarinen, 2010, p. 456). This region is easily accessible from the rest of Europe by road, train and air.

Sámi tourism has been promoted to the Swedish Sámi as a way to gain new income and remain in the local community. The development of Sámi tourism in northern Sweden is still in the early stages (Müller and Pettersson, 2001; Myrvoll, 2004; Ulvevadet, 2004; Labba and Jernsletten, 2004; and Petterson, 2003). However, tourism complements the existing reindeer herding activities (Müller & Huuva, 2009).

In Sweden, under the current legislation, Sámi tourism must be run individually or in other forms, with only indirect links to reindeer herding. The Swedish part of Sápmi has about 40 Sámi tourism entrepreneurs in (Pettersson, 2002, p. 357). Müller and Huuva (2009, p. 4) comment, “Most tourism entrepreneurs are […]members of a cooperative because this is the only way to guarantee access to the major touristic asset, the reindeer.”
According to Sámiskt (2006b), since Sweden joined the European Union, investments in business, labour market, and employment policy measures targeted at the Sámi had increased. This new investment has recognised the Sámi’s special position as an Indigenous people and strengthened regional balance and economic development. The EU contributed about EUR 195 billion in structural funds and Sweden about SEK 19 billion (EUR 2.186 billion). These funds were directed at strengthening Sámi business - both traditional trades and new, vital businesses to preserve the culture and social life.

3.3 **Other Selected Indigenous Reindeer Herders in Europe, Russia, Greenland and Alaska, USA**

In Section 3.3, I discuss literature pertaining to the Sámi reindeer herders in Norway and Finlad and selected Indigenous reindeer herders in Russia, Greenland and Alaska, USA.

3.3.1 **Norwegian Sámi Reindeer Herders**

In Norway, only people of Sámi heritage are allowed to herd reindeer. They must also demonstrate that their families have herded reindeer in the past. As an exception to this rule, about 12,000 reindeer are herded on “concession areas” by both Sámi and Norwegians. About 2,700 Sámi have reindeer, either as their primary or part-time occupation. Norway has 240,000 reindeer which are which are herded over about 40% of its area (NRHA, 2007).

Norway has six reindeer herding areas divided into 556 management units (NRHA, 2007). The Finnmark region in the north, is home to 73 percent of all reindeer herders. In the Norwegian management system, the husbandry unit (driftsenhet) is the basic element.

Norwegian Reindeer Herding Act (*Lov om reindrift 2007-06-15-40*) which regulates reindeer herding in Norway was passed in 2007. It clearly indicates, “Only those who have the right to a reindeer earmark can conduct reindeer husbandry in the Sámi reindeer herding area. The right to a reindeer earmark requires that the person is a Sámi and themselves, their parents or their
grandparents have or had reindeer herding as their primary occupation” (NRHA, n.d.).

The Norwegian Reindeer Husbandry Board (Reindriftstyret in Norwegian and Boazodoallostivra in Sámi) is responsible for reindeer husbandry on the national level. It has four members appointed by the Ministry and three appointed by the Sámi Parliament (Sámediggi). Through Area Boards, it grants a license that entitles a person to manage a herd of reindeer within a delimited area as well as the size of the herd (NRHA). The unit leader (i.e., the owner and manager of a management unit) must have herding as his main occupation. The herd is monitored to ensure it follows the agricultural rules and regulations. Currently, a Norwegian Sámi reindeer hereder is allowed to personally sell up to 10 reindeer. However, the government through its licensing and regulation is able to adjust the number of reindeer based on the capacity of pasture lands (Ulvevadet & Hausner, 2011).

A husbandry unit may include the reindeer belonging to relatives. Although reindeer are owned by individuals, several related families may herd cooperatively together as traditional collectives called siida (Næss, Bårdsen, & Tvera, 2012). They may also join and regroup with other families through the seasons to manage the herding on various pasture lands. The tradition of collective herding maintains many informal bonds (Myrvoll, 2004).

The new Act gave siida boards the responsibility to make plans for reindeer adjustments and these are then submitted to regional area boards for approval (Ulvevadet & Hausner, 2011). Thus, although the family based co-operation is still maintained, Norway’s reindeer husbandry has been rationalised and the husbandry unit has moved through government regulation to more of one-person enterprises (Ulvevadet, 2004).

Reindeer herding in Norway is a small industry. Norway reindeer meat receives very little protection from foreign competitors. It had only a 9 per cent tariff protection where as beef had 40 per cent; lamb, 77 percent; and mutton and pork, 93 per cent. In 2000 the market value of reindeer meat produced in Norway was about 70 million Norwegian kroner. In the early 2000s, the
government also introduced a system of approved listed slaughter houses as well as tightened hygiene and food safety standards. As a result, the Sámi were forced to truck and sell their reindeer to Norwegian owned slaughter houses. These slaughter houses also paid lower target prices (Reinert, 2006).

Sámi reindeer herders are taxed like any other entrepreneur in Norway. Their income consists of the production of meat and raw materials such as skins, bones and horns. Additional sources of income include financial subsidies and compensation. The Sámi reindeer herder receives full compensation from the government for losses caused by traffic accidents and predators up to the full slaughter and grant value of the animal (Labba et al., 2006). The largest sources of expenses are related to agricultural equipment.

Norwegian Sámi herders have a lower mean income than workers in most other industries. Ulvevadet (2004) found that Norwegian reindeer herders made almost as much income from selling handicrafts as from meat production. The products were made during the winter and sold during the summer to tourists. Often people worked together, exchanging knowledge and experience. They also purchased and sold raw materials. This interaction maintained social relationships and strengthened Sámi identity.

Sámi tourism is not as well developed in Norway as in Sweden and Finland. Sámi Tour, a web portal, was created in 2001 for jointly marketing Sámi tourism in Norway. The Sámi Parliament and Norwegian Research Council sponsor the website (Fonneland, 2013). Viewers can choose from five optional languages: Sámi, Norwegian, German, Finnish and English. Seven Sámi tourist entrepreneurs are portrayed separately on different web pages.

Over a 23 year period, 15% of Sámi in Norway moved from the traditional settlements to cities. From 2000 to 2012 more people moved out than in annually (Statistics Norway, 2014). In the area of Norway which receives subsidies to maintain Sámi reindeer herding, “81 per cent have education at basic school level or below secondary level as their highest education. The equivalent is 70 per cent in the country as a whole” (Statistics Norway, 2014).
3.3.2 Finnish Sámi Reindeer Herders

Reindeer pastures cover about 36% of Finland’s total territory. About 1000 Sámi families raise about 200,000 reindeer. About half of these are full-time herders. The annual production of reindeer meat is about 2-3 million kg. Reindeer husbandry brings in about 32 million Euros annually, half of it from meat production, the other half from tourism, meat processing and subsidies (Muuttiranta, 2014).

These Sámi reindeer herders are primarily located in the north and north-east portions of Finland. However, unlike Sweden, all Finnish people are allowed to own reindeer. Herding is regulated through the Reindeer Herding Law, which allows for the formation of 52 co-operatives (paliskunnat). These manage the reindeer husbandry and undertake infrastructure investment like corrals, fences, and some slaughterhouse. The Association of Reindeer Herding Cooperatives (Paliskuntain yhdistys), a central body, oversees the management and development of reindeer herding and husbandry, links the cooperatives, and promotes survival of reindeer husbandry. The Ministry of Agriculture sets out the overall number of reindeer, the number each cooperative can herd, and the maximum number per owner. The reindeer herders have also formed an association to represent their interests and rights.

Traditionally, the Finnish Sámi slaughtered the reindeer and used all its parts in everyday life. However, their techniques and practices associated with reindeer breeding, herding, harvesting and processing have changed over time. Today, most reindeer herders follow an economic model selling the live reindeer directly to the slaughtering/processing facility. This model has become more attractive as the food hygiene and safety standards have increased. Some cooperatives own slaughterhouses. Their members can use more parts of the reindeer than the meat as the skins and antlers are available for handicrafts and clothing.

Heikkinen (2006) studied four reindeer herding cooperatives of Sámi origin in Finland from 1998 - 2002. He divided adaptation strategies of reindeer herding to three cultural adaptation models with seven sub-models: 1) traditional models of reindeer hunting as (1a) “the indigenous”, (1b) “the way of life”, and (1c) “the
natural”, (2) economic models of (2a) “the full time profession” or (2b) the
subsidiary livelihood”, and (3) adaptation avoidance models – (3a) “the
opposition to change” and (3b) the profit or quit models.
Muuttoranta and Mäki-Tanila (2011 and 2012) examined regional differences in
reindeer herding operations in Finland. The Finnish Sámi located in the northern
three regions held 5945, 3869, and 4927 reindeer. In these regions, the
cooperatives met annually to determine the total number of animals in the whole
cooperative and how many to slaughter before winter. They did not like to use a
herder specific quota for slaughtering as this was seen “as an obstacle for the
young herders to increase the initial herd size” (p. 149). They used winter
feeding as a way to keep the reindeer together not for nutritional supplement.
Selection of reindeer for breeding purposes was extremely important and
included “hair quality, maternal care of dam, dam, calf size, muscularity, health
and vigour” as well as “antler traits” (p. 146) .

Since Finland joined the EU in 1995, the full-time reindeer herders received a
per-head subsidy as well as some operating support. They also were
compensated for losses due to predators, trains and vehicles. However in the
early 2000’s, the annual income of Sámi reindeer herders “had dropped to
5,045” (which was approximately half of the annual gross income for other
Finnish farmers (Müller-Willie et al., 2006, p. 35).
The downward trend has continued. In 2013, the average income in reindeer
herding had dropped by more than half from the previous year. Burgess (2013)
reported that: “The average income for a reindeer herding enterprise in the 2012
– 2013 production year is expected to be a mere 2,870 Euros, down from the 6
500 Euros seen in 2011 – 2012, which in turn had declined by 20% from the
previous year.” Sami reindeer husbandry is more profitable in the far north of
Finland is more profitable. Reindeer herding faces competing land use from
forestry, mineral extraction and hydroelectric projects as well as other
agriculture (Müller-Wille et al., 2006). Increased predation and tourism also
have affected the profitability of reindeer herding.

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Dana and Riseth (2011) found that reindeer herding remained a reflection of cultural values. Even if the income was dropping, the owners still wished to be reindeer herders and would take on alternate ways of supplementing the income. Furthermore, reindeer herders wished to transfer the reindeer herding to their children.

In Finland, the Sámi culture and reindeer have been used to promote tourism. Often the tourism is done near popular tourism resorts and involves trips to the corral or bringing tame reindeer to tourist centres for sleigh rides. Ulvevadet (2004) described an informant’s reindeer safaris where the tourists travelled using all-terrain vehicles or snowmobiles to camp near the reindeer herd in tents and taste different Sámi foods.

Kemi, located in northern Finland, hosts the annual construction of the world’s biggest snow castle (Benediktsson & Suopajärvi, 2007). For the past 19 years, the LumiLinna chapel, restaurant and hotel have been constructed of ice and snow annually (Kemi Tourism Ltd., 2015). Kemijärvi, the most northern community in Finland, has the Ethnographic Museum and Cultural Centre as well as tourist attractions like fine restaurants offering traditional foods, reindeer and snowmobile safaris, and fishing expeditions (Discovering Finland, 2015). Utsjoki, is a traditional Sámi living area and the only municipality in Finland where the Sámi people are the majority. This area along the Teno River has a 100 year association with salmon tourism during the summer. Aitto (2014) indicates that tourism is seen here as the only livelihood with some potential to develop. They established a Sámi tourism and entrepreneurship association in 2009 “to further their rights of non-traditional Sámi livelihoods in Sámi living areas” based on Sámi culture and traditions (p.172).

The Finnish Sámi have also been active in biotechnology innovation. Pekkarinen, Jämsä, Määtä, Hietala and Jalovaara (2006) reported on the use of reindeer BMP extracts to heal bone defects in rabbits. Bioactive Bone Substitutes Ltd. (BBS) (n.d.) reported it had isolated bone growth factors from reindeer bone and completed pre-clinical trials on animals for use as a bone
graft substitute in humans for the treatment of fractures or bone degeneration from osteoporosis.

3.3.3 Selected Russian Indigenous Reindeer Herders

Russia has about 1.2 million semi-domesticated reindeer and 1 million wild reindeer (Forbes & Kumpala, 2009). Russia has about two-thirds of the world’s domesticated reindeer (Klokov, 2007). Unlike in Finland, Norway, Sweden and Alaska; many Indigenous peoples in Russia are reindeer herders. These include the Komi and Yakuts plus sixteen Indigenous peoples from populations of less than 50,000 (Klokov, 2007). The main reindeer-breeding peoples of Russia are the Nenets, Eveniks, Khants, Evens, Chuckchies, Komisizhentsy, Mansi, Koryaks, Dolgans, Selkupes and Sámi (ordered from most numerous to least numerous) (Klokov, 2007). The Nenets own the most reindeer stock followed by the Komi-Izhems, Chukchi-Koriaks, Tungus-Yakuts, and Sámi (Klokov, 2007). Although Russia does not restrict reindeer ownership only to Indigenous peoples, no Russians are reindeer herders (Klokov, 2007).

Russia is a huge country with vastly differing geographic and social areas which affect reindeer husbandry. Klokov, a world expert in reindeer husbandry, discussed the evolution of reindeer husbandry in Russia (2007, 2012). He classified Russian reindeer husbandry by institution, ecology and culture.

Institution

Traditional reindeer herding was family-based. Extended families travelled nomadically as they moved the herds to avoid over-grazing and trampling of the tundra’s vegetation. Russia’s political history has affected the institutional nature of reindeer husbandry.

From the 1930s to the 1980’s Soviet/Russian policies encouraged the Indigenous reindeer herders to become more sedentary and modern. The reindeer herders and their families were provided free accommodation in towns and villages. The law also changed requiring all children to receive primary education. If the families were to remain nomadic, their children had to stay in boarding schools. A policy of “productive nomadism” encouraged families to
stay in the communities for school and work. By instituting “shift pasturing”, groups of reindeer herders would rotate staying with their families and being on the tundra with the herd for one to three months. A policy of collectivisation resulted in households integrating their herds into collective farms (kolhoz pl. kolhozy). Each brigade had 5 or 6 herders (Dwyer & Istomin, 2009, p. 292). The public media portrayed reindeer herding as a male occupation and women working in the reindeer brigades received lower wages (Klokov, 2007).

The state again ordered the reorganisation of reindeer herding during the sovkhoz amalgamation. Reindeer became the property of the state. Reindeer herders and their families were employed in brigades to closely manage the reindeer. Each reindeer herder was allowed to own only 30 reindeer (Smetanin & Savel’eva, 2004, p. 504 as quoted in Dwyer & Istomin, 2009). The state purchased the reindeer meat at higher prices so the income covered the expenses of salaries, transport, fuel, communication, field tents and cloth (Baskin, 2000, p. 27).

Reindeer populations of the state enterprises remained stable. However, over time the number of private or personal reindeer increased. The family structure of reindeer herding also changed. Instead of two herding families living in the tents, these now contained 8 to 10 workers (primarily male) belonging to several families (Dwyer & Istomin, 2009, p. 292). During the sovkhoz amalgamation, the state also closed villages which were considered non-viable and reduced the available supplies and services. The villagers were resettled into small towns and larger villages.

Following the breakup of the Soviet Union in 1991, Russia was split into 15 states. It moved from a centrally planned to a market economy with privatisation and fiscal decentralisation. The sovkhozes changed into joint stock companies or municipal enterprises (Klokov, 2007, p. 730). Some state-owned herds were divided between the reindeer herders. Later, some of these reindeer herders organised into associations or clan-communities (obshchiny). For example in the Nenets Autonomous District in northwest Russia, Tuisku (2002, p. 147) reports that, “The ten reindeer herding kolkhozes and three sovkhozes
were reorganised into seven joint stock farms..., two joint stock enterprises..., two agricultural production cooperatives... and one community-owned enterprise]....Two new units have emerged...in which all reindeer are privately owned.”

Reductions occurred in state subsidies to the enterprises, deliveries of food and essential goods like petroleum, and state procurement of reindeer meat and other products. The wages of reindeer herders also declined. Many reindeer were slaughtered or abandoned and allowed to mix with the wild reindeer herds (Jernsletten and Klokov, 2002; Forbes & Kumpula, 2009). Restrictions on private ownership of reindeer were lifted in 1993. To offset the income losses, reindeer herders increased their private ownership of reindeer and sold reindeer products in towns. More than half of the reindeer herders’ annual income now came from selling reindeer products (Dwyer & Istomin, 2009, p. 294).

Responses to these political directives varied among Russia’s Indigenous peoples. In the northwestern regions of Siberia, many reindeer herders retained their extended family herds and did not collectivise into reindeer enterprises. In contrast, the Chukotka’s reindeer were taken over by the state and few reindeer were now privately owned.

The state owns all lands assigned to reindeer husbandry. To encourage the exploration and development of mining, oil and gas; the state changed the status of lands traditionally used by the reindeer herders. Lands for reindeer pastures have declined by 23% and pasture lands with sufficient quality of lichen for reindeer declined by nearly 20% (Dallmann et al., 2011, p. 241). Historic winter pastures and sections of migration routes were eliminated. Reindeer herders were forced to create new winter pastures from routes which were previously used only for temporary grazing during reindeer passages (Dwyer & Istomin, 2009). Therefore, migration routes became shorter. Reindeer herders have become concerned with “pollution of pastures, illegal waste disposal, pollution of water resource, decreases of fish, poaching by oil workers, and others, and attacks by stray dogs on domestic reindeer” (Dallmann et al., 2011, p.245). In addition, they were concerned by degradation of pastures, and berry
fields and reduction of wild animals (Dallmann et al., 2011, p. 242). Dwyer and Istomin (2009) point out that only Vorkuta herders still use their traditional winter pastures and continue the long trans-Ural migration. Their town is located much closer to the Kara Sea and very few pastures are available for the reindeer to graze (Habeck, 2002).

The Evenki were faced a severe economic crisis in early 2000 accompanied by severe malnutrition related illnesses. Anderson (2002) reported that the Evenki Parliament approved 1.6 million rubles for the revival of reindeer husbandry and 150,000 rubles towards the newly created State Trade and Purchasing Company “Evenkiia” for the establishment of a local meat processing plant in Chirinda and the purchase butchering equipment. The Directed Assistance Programmes for Sparse Native Peoples of the North included in its 10 year agenda, the building of at least 6 processing plants in the Evenki district and 59 tonnes of refrigerated storage space for meat. The STPC owned a store in every community in northern Evenkiia. Federal state subsidies also assisted with the transport costs of shipping food out by airplane, helicopter or winter road. In addition, they provided a free back-haul for the caribou meat and berries. In 2001/2002, STPC ‘Evenkiia” purchased and shipped 80 tonnes of wild meat at a price of 20 rubles per kilogram. They also provided the export licenses for the meat.

Anderson (2002, p. 7) also reported on the formation of the Municipal Community Corporation “Chirinda”. Chirinda is a small Evenki community located in the foothills of the Putoran Mountains. It also has replaced the former state farm which provided the inputs, buildings, warehouses and federal subsidies for the hunting, processing and shipping of the migratory caribou which passed near the community.

**Ecology**

Tundra reindeer husbandry covers almost all the tundra and forest-tundra in Russia and mountainous taiga areas in the north-east. It is characterised by large-scale reindeer husbandry with the economic goal to produce meat. Some enterprises also produce soft antlers or full use of the reindeer resources (skin, antlers, blood, endocrine glands).

The herd size ranges from 1000-3000 reindeer. Generally, the summer and winter pastures are located long distances apart thus requiring a migration of several hundred kilometers. In the summer, the herds graze the shores of the northern seas and in the winter, they graze in the forest tundra and northern taiga. Herds located in the forest-tundra and mountains graze year-around in the same areas with short migrations of less than 100 kilometers.

Taiga reindeer husbandry has much smaller herds ranging to a few hundred animals and the herds only migrate short distances. In loose herding, the reindeer graze alone and the herders periodically gather up the scattered animals and move them to fresh pastures. Sometimes, the reindeer are kept in fenced areas (Baskin, 2000, p. 24). In the ‘free camp” system, the herders keep the reindeer near the settlements or camps. The purpose of taiga reindeer husbandry is subsistence, transport, and sale to local markets (Baskin, 2000). While reindeer are to used ride, carry goods and pull sledge, the main income is from products of hunting fur-animals. Taiga reindeer husbandry has been declining with the lots becoming smaller and more separated. Less reindeer are needed with the availability of power-driven transport such as snowmobiles. However, with gas prices increasing, some herders have returned to the traditional reindeer transport.

Culture

Cultural traditions of Russia’s reindeer herding people vary greatly. They differ in management and control, domestication, equipment, dwelling, clothing and shoes, transport, milking, dogs, and fences and sheds. These cultural traditions also affect the choices of economic strategies and ways of adapting to the market economy (Klokov, 2007).
Only the Sámi on the Kola Peninsula use loose or semi-loose herd management in winter. They strictly control the females during calving. The reindeer are released for summer and then gathered in large herds again after the rutting season.

The Samoyed type mainly occurs in the western part of the taiga and tundra. The Komi moved to the Kola Peninsula in the 1880’s. Generally, the Komi keep 2,000 – 4,000 reindeer. Unlike the Sámi, they practice close reindeer herding all year. In winter, they visit the herd daily; in fall, they watch during daylight; and in spring/summer, one reindeer herder stays with the herd for a 24 hour shift. They traditionally use a high sleigh drawn by three or four reindeer for transport in winter. They also use two to four dogs for herding. The Komi keep castrated reindeer for transport near the campsite. The main herd consisting of female and non-castrated male reindeer as well as calves (80% of herd) is pastured up to 10-15 kilometers behind. The Komi move in a linear direction; they drive the reindeer toward their camp but never bring them into it. The Komi herders work in teams of six to eight males and several females. All live in a conical shaped tent (chom). The Komi sell the live animals to slaughter enterprises, reindeer meat (occasionally), shoes made from the reindeer skins, velvet, and stiff antlers (Klokov, 2007). Value added production is limited to items sold within the Komi community and there is little market demand for handicrafts.

The Nenets of the Yamal Peninsula have the largest reindeer stock in Russia. Approximately half of the 10,000 Nenets still are nomadic reindeer herders (Forbes et al., 2009). The Nenets were extensively studied by Stammler (2005). Their annual migrations may be as long as 1,200 km between the tree-line and the northern tundra. They have very close relations with their animals, rounding the herds up daily and driving them to the campsite to check their health and choose animals for slaughtering. All reindeer are pastured as a single herd of 1500 to 3000 animals. From the end of April to the end of May, the Nenets separate the pregnant, newly calved reindeer, and calves into a separate herd which they try to move as little as possible (Dwyer & Istomin, 2008). In contrast to the Komi, the Nenets move in a circular pattern within a territory. To the Nenets, the size of the herd denotes social status and wealth.
Today, the reindeer are owned by cooperatives, private herders or more recently clan collectives (Dallmann et al., 2011). Since 2000, the reindeer stock has rebuilt to about 150,000 to 160,000 reindeer as result of state subsidies and support for reindeer husbandry and improvements in veterinary services, herd structures and markets (Dallmann et al., 2011; Klokov, 2007). The income levels of the reindeer enterprises have remained stable and annual meat production has increased.

The Chukchi-Koriak people live in the northeastern corner of Siberia. This region is largely tundra and low mountains while the southern and western areas of the region consist of taiga. Their culture is based on reindeer herding, coastal sea mammal hunting, wild reindeer hunting and fishing. They have large herds although their relationship with the animals is not as close as the Nenets. In the winter, they use sledges constructed differently from the Nenets. In the warm seasons, they travel on foot and do not harness the reindeer (Nuvano, 2007). Their traditional dwelling is a tent (yaranga). Klokov (2007, p.741) indicated that the number of reindeer had rapidly declined and the state was again providing financial support to the reindeer herding enterprises and reindeer herders.

The Evenki reindeer herders live in the boreal forest (taiga) of northern Siberia. The Evenki families work together in clans for herding, hunting, and gathering. A typical clan consists of three to four families with no sub-division or up to about ten families that are typically divided into three sub-clans (Gron & Turov, 2007, p. 62-63). Each larger clan or alliance of smaller clans has a territory for land use and within these the families are assigned territories for hunting and gathering. The maximum herd size is 80 to 100 reindeer as this allows the Evenki to hunt and trap game, fish and gather while still find grazing for the reindeer (Gron, 2011). The family keeps about 15 to 20 reindeer trained to ride, pull sledges and use as pack animals. A few bulls may be trained as bait instead of using dogs for hunting wild reindeer (Povoroznyuk, 2007). The remaining animals are not trained for a specific purpose. The Evenki do not kill their domestic reindeer to eat, except in very special ritual or during starvation (Gron & Turov, 2007). They do not use the skin, fur or meat of their reindeer which
die of natural causes (Gron, 2011). The domesticated reindeer represent the household’s status and wealth so that the family can use this for paying ‘kalym’ (a kind of dowry).

With the collapse of the state-run economy, high quality goods became unavailable and too costly for hunting and reindeer herding. They turned to making items locally which were necessary for subsistence and for living long periods in harsh taiga environments (particularly with the extreme cold). The Evenki men and women have relearned and use the traditional skills for tanning, producing and sewing hides to make clothing, shoes and gear (Brandišauskas, 2010).

Klokov (2007, p. 741) suggested that the future economic prospects would come from cultural and recreational tourism and breeding reindeer within fences.

Large areas of land in Russia have been degraded by oil and gas exploration and production and by construction of pipelines, roads and rail lines. Forbes (2008) commented that the amount of area directly disturbed in Russia is typically greater than in North America, in some cases by an order of magnitude. Fish stocks in rivers and lakes are also depleted because of bridge building, sand and gravel quarries and water landing of airplanes. Pet dogs belonging to workers also wander and prey on the reindeer.

Oil companies provide compensation for loss of pasture lands and offer services such as helicopter transport of people and goods thus reducing transportation expenses associated with the reindeer herding. Some Indigenous peoples have used airplane backhauls from the oil companies to transport the reindeer antler velvet at lower costs which has made the trade sustainable as world market prices declined (Forbes et al., 2009).

Unlike European Sámi, the Komi, Nenets and Evanki have been willing to harvest panty (newly grown reindeer antlers in summer where there is not yet bone) and sell this to the pharmaceutical companies (Stammler, 2005; Anderson, 2002). Rantarine was extracted and used as a medicine to strengthen
immune systems, the blood and virility. Reindeer herders from Russia are facing increasing competition from domestic reindeer from New Zealand for velvet exports to Korea and China. For example, *Reindeer News* of New Zealand (2013, p. 4) reported that the value of New Zealand deer exports of velvet to China “increased to $17.5 million….Certainty of supply and high quality standards make New Zealand supplier of choice.”

Aromäki (2006) noted the quality of Russian competition has also increased as a result of the training programs focused on marketing, by-products, reindeer husbandry, slaughtering, meat handling, by-products, and administration provided by the international training partnerships of the Arctic Council and Northern Forum.

3.3.4 Alaskan Inupiak Reindeer Herding

The Inupiak make up most of the Alaska Native population of the North Slope, Northwest Arctic and Bering Strait regions. They have hunted caribou (wild reindeer) for subsistence for thousands of years (Ray 1975). Some Inupiaq communities used to organise cooperative hunts, ran the caribou through chutes into pens and lakes then used snares, spears and kayaks to capture and kill them (Spiess, 1979). Over hunting of the caribou for trade combined with the introduction of firearms decimated the resident caribou herd (Ray, 1975). As permanent whaling stations were established, the Inupiak traded caribou meat and skins. The caribou herds also shifted their migration patterns away from the settlements, perhaps due to weather changes and predators.

Alaskan Inupiak, for the most part, live in their traditional territories. They continue to rely substantially on hunting, fishing, and gathering to provide for their sustenance. Caribou remain an important part of their diet. Caribou was the top-ranked species harvested in terms of edible weight, and accounted for 30% of the subsistence harvest in 2003 and 2006 in seven communities of northwest Alaska (Magdanz, Koster, Naves, and Fox, 2011). The community of Kiuna reported harvesting over 300 caribou which a total useable weight of about 41,600 lbs” (p. 47). Most households have some family members who are primarily focused on subsistence while others work in temporary or part-time
jobs. Cash is important as it pays for the fuel, repairs and equipment. Unemployment remains high (West, 2011).

The US government introduced reindeer herding to Alaska in 1891. They purchased reindeer from Russia and Siberia to provide an economic livelihood for the Alaskan native. First, reindeer herders from Russia then Sámi reindeer herders from Norway and Finland were hired to train the Inupiak (Stern et al., 1980). However the Inupiak and Yu’pik herds remained too small to be economically viable. The US government encouraged the Alaskan Natives to develop cooperative herds with joint ownership and to use open grazing (similar to the ranching in the mid-western US) (Finstad, Kielland & Schneider, 2006). The Sámi had also developed private reindeer herds. A Sámi sold 1200 reindeer to the Lomens, a non-Native family who had moved north from Seattle, Washington. For the next 25 years, they controlled the Alaskan reindeer industry and developed a large commercial export enterprise (Finstad, 2006).

To give the Alaskan Natives more participation and control, the Reindeer Industry Act (25 U.S.C. §§500–500n; PL 75–413) was passed in 1937 (Ellana & Sherrod, 2004). The Act gave Alaskan natives the exclusive right to own reindeer herds in Alaska and manage the business associated with it. The Secretary of the Interior could “acquire reindeer, reindeer-range equipment, abattoirs, cold storage plant, warehouses and other property for and on behalf of Eskimo and other natives of Alaska” (ANC, 1992, p. 111).

The U.S. Government purchased the herds of all non-natives and loaned or sold these back to the Inupiak and Yu’pik who operated them as private enterprises (Stern et al., 1980). The reindeer still grazed freely on open ranges however the herders moved them frequently. The Alaskan Bureau of Indian Affairs (BIA) introduced and managed grazing permits (Christie & Finstad, 2009). The BIA also introduced new handling and more efficient slaughter methods (Stern et al., 1980). This introduced a period of stability. The reindeer meat was marketed primarily in Alaska.

The Northwest Reindeer Herders Association was established in 1964 but was reorganized in 1971 as a cooperative, the Reindeer Herders Association. Its
purpose was to further the development of the reindeer industry on the Seward Peninsula (Stern et al., 1980). Modern techniques of reindeer husbandry were introduced in the 1970’s and 1980’s (Finstad, Kielland & Schneider, 2006).

The exclusive right of the Native Alaskan to reindeer herding was challenged in the courts during the late ‘80s. Tom Williams, owner of Williams Reindeer Farm and a non-native, described how the Court of Appeals ruled in 1997 that “non-Natives in Alaska may own reindeer obtained from any source other than from Natives or the Federal government in Alaska”. This was appealed to the U.S Supreme Court but it declined to hear the case and upheld the ruling (Howk, 2003).

According to Christie and Finstad (2009, p. 363), “Sales of [Alaskan] reindeer meat, velvet antler and by-products totaled $US 8.3 million and $US 10 million between 1987 and 2003.” The sale of reindeer meat was the most important contribution to the local economy. Because reindeer mixed with the migrating wild caribou, Rattenbury et al., (2009, p.71 reported, “Between 1992 and 2005, over 17,000 reindeer (approximately 80% of peak herd numbers) were lost. Eleven of 15 herds lost 90–100% of their reindeer, or are now too small to be economically viable.” Carlson (2005) estimated the loss to the regional economy was more than $1.4 million USD per year, at year 2000 values or a direct economic loss of over $16 million over the last decade.

They began selling reindeer antlers covered with velvet on the international market in the early 1970s. The antlers were harvested without killing the animal. The Asian market declined as a result of the recession in the 1990s (Grover & Renecker, 1994). According to Stammler (2005, p. 308), the price for 1 kg of high quality panty was $300 at the peak before 1995, collapsed to $30 per kg in 1998, and had risen to about $60 to $80 since then. Korea and China banned the import of velvet from the United States in 2001/2002 because of concerns about chronic wasting disease (CWD). Reindeer hides were sold locally to make boots and parkas

Finstad, Kielland & Schneider (2006) described how reindeer herders have changed their management strategies and adopted new technologies. They
created reindeer refuges to protect from caribou and culled their herds of animals which attempted to join the migrating caribou. They introduced satellite-radio radio collars and the internet to more effectively herd and monitor their reindeer. Other herders used enclosures and supplementary feeding. Reindeer that join caribou herds have difficulty surviving due to starvation, predation, or human hunting (Christie & Finstad, 2009).

Alaska produces only 5% of its food supply leaving it vulnerable to higher energy prices and outside market demand (Christie & Finstad, 2009). Currently only three reindeer herds are commercially viable (Dau, 2007, p. 197). Efforts have been made to make the reindeer industry in Alaska more economically viable and to build the market for reindeer meat.

Until 2003, the reindeer herders could only sell their product locally within Alaska and they could not sell to restaurants or nationally registered organisations. The Alaska Department of Environmental Conservation created a state-run voluntary reindeer slaughtering and processing inspection program (Howk, 2003). With this inspection program, reindeer meat could be sold to restaurants and other national distributors.

Nunivak Island has a herd of reindeer which was established for commercial purposes by a Russian-Eskimo trader. The BIA purchased this in the 1940s and constructed a slaughter house in 1945. The Native Village of Mekoryuk through its subsidiary, the Bering Sea Reindeer Products Inc., operated the reindeer processing plant (Knapp et al., 2001, p. 2-6). This later was purchased and operated by the Nuniwarmiut Reindeer and Seafood Processing Company, Chu’pik’s tribal corporation. The reindeer run free on the island and are rounded up for slaughter. Finding snowmobiles and airplanes too expensive, they have returned to herding on foot.

In 2003, their corral and facility at Mekoryuk was inspected and received USDA full certification as a commercial slaughtering operation (Howk, 2003). This will open the door to exports beyond Alaska into the U.S. or other countries. In 2004, eleven employees from the company graduated from a commercial meat processing and packing class administered by the Division of Business
Partnerships in the Alaska Department of Labour and Workforce Development. This enabled the company to apply a USDA sticker to its game meat products. The sticker is viewed as a necessity for entering major national and international markets (Alaska DLWD, 2004).

Alaska had about 18,000 reindeer in 2010. Richardson (2010) reported that almost all Alaska’s reindeer meat was processed into sausage, “even the choice cuts went into the grinder”. Reindeer researchers at the University of Alaska Fairbanks under the direction of Greg Finstad had undertaken a market study to determine whether local consumers would purchase high-end cuts of reindeer meat and at what price. If the project is successful, the supply chain would shift to Seward Peninsula reindeer herders.

In 2011, the University of Fairbanks Northwest Campus (University of Fairbanks, 2011) reported on their partnership with the UAF’s Reindeer Research Program to advance the High Latitude Range Management and Meat Sciences programs. They purchased a Meat Sciences Lab (portable slaughtering facility), added Heikki Muhonen, an internationally recognised expert in reindeer processing to their faculty and hired a coordinator to build both the HRLM and MS programs. Meat cutting workshops were offered on St. Lawrence Island.

3.3.5 Greenland Indigenous Caribou and Reindeer Enterprise

Caribou (tutu) is important in the culture and diet of Greenlandic Inuit. Eleven caribou herds are located in both the West and Northwest Regions of Greenland with approximately 74% of the caribou located in West Greenland (the southern half of Greenland’s west coast). Caribou have no known predators in Greenland, Therefore, their population is subject to range capacity (herbivore diversity is low), competition from within caribou herds, pathogens, human harvest, and effects of climate change (Witting & Cuyler, 2011, p. 136). Within the West and Northwest Regions, there are no roads to connect settlements, and only one hydro power plant exists which has a transmission line to Nuuk.
Caribou harvest advice is provided annually to the Government of Greenland by the biologists with Pinngortitaleriffik (the Greenland Institute of Natural Resources). The law prevents hunters from using vehicles with motors such as snowmobiles or ATV’s. Caribou hunting takes place for subsistence, commerce and sport.

Greenlandic Inuit hunters have been selling harvested caribou meat to the Danish colonialists (non-Greenlanders since 1721) and more recently to other Greenlanders in outdoor kiosks. They also sell directly to other households, institutions and state-owned processing plants (Marquardt & Caulfield, 1996; Cuyler, 1998).

Reindeer husbandry is less than 50 years old in Greenland (Cuyler, 1998). Between 1920 and 1950, caribou had become scarce in West Greenland. In 1952, The Danish government brought 300 reindeer and 20 Sámi from Norway to West Greenland. The Sámi were to train several Greenlandic Inuit as reindeer herders so they could take it over. In 1974, Anders Triumf, a Sámi reindeer herder purchased the herd and leased the field abattoir. Four years later the herd of 589 live reindeer was sold to the Kapisillit Cooperative. No Greenlandic Inuit had received training in reindeer husbandry. Over the next few years the Norwegian Sámi model of reindeer husbandry was lost. Practices which stopped included: close supervision, seasonal migration; calf marking; slaughter only of castrated males. The herd also intermingled with the wild caribou (Cuyler, 1998, p. 86).

In 1961, John Haetta, a Sámi reindeer herder purchased 500 reindeer from the Itivnera herd. He moved the private herd to the Kangerlupiluk Peninsula and built a fence to keep the two herds separated. He continued to practice seasonal migration. Through selective slaughtering and sound reindeer management, he rebuilt the herd to about 1000 reindeer (the optimal winter herd size). In 1971, this herd was sold to Pavia Berthelsen, a Greenlander and the Sámi reindeer herding practices stopped. Breaks in the fence allowed the reindeer to intermingle. In 1975, the Danish State took over public ownership of the herd. In 1976, the Kangerlupiluk herd also became the property of the community of
Kapisillit under the management of the local Greenlandic Cooperative, *Kapisilinni Tuttuutteqatigiit* (Cuyler, 1998, p. 82 and 87).

In 1996-97, the Greenland government was given the right to regulate, inspect, and supervise reindeer husbandry (Cuyler, 1998). In 1998, Kapisillit sold the herd to the Nuuk municipality. The Greenland government approved the purchase on the condition that the herd was not farmed. The Nuuk municipality liquidated the herd through commercial and sport hunting. The Greenland government’s Wildlife Management Branch took over responsibility for the remaining reindeer and caribou in this region.

The Isortoq herd in southern Greenland is privately owned by Ole Kristiansen - a Greenlander, Stefan H. Magnusson, and Ingvar Gardarson, an Icelander (p. comm. 2015.) Mr. Magnusson was trained in Sámi reindeer herding in Sweden. The station has roughly 2000 reindeer that freely roam over 1477 km². The herd has been affected by climate change. Freezing and thawing of the grazing pastures make it difficult for the reindeer to graze. They are not permitted to use feed supplement. The operation lost 800 reindeer this year alone. Normally the station would harvest about 1200 reindeer annually but likely for 2015 this will be reduced to 500.

The station previously used helicopters to gather the reindeer. Mr. Magnusson first experimented with paramotors then switched to gyrocopters for large scale herding. The station does not use radio collars or satellite monitoring. Mr. Magnusson uses snowmobiles and previously sometimes rode horses.

Isortoq’s slaughter facility was EU-Certified in 2001 and received Canadian approval in 2003. To obtain the certification, Isortoq significantly upgraded its space, added more environmental controls, and implemented HACCP systems. Mr. Magnusson’s grant application to assist with the upgrades was rejected. Isortoq exports frozen carcasses to Iceland for further processing. Skins are exported to a tannery in Finland. Isortoq does not sell antler.

Previously 70% of Isortoq’s product went to Canada and some from Canada to the United States, 10-15% to the local Greenland market, and 5-10% to Denmark (Humphries, 2007, p. 12). This product distribution has significantly
changed. The enterprise also produces frozen reindeer meat products such as haunches, backs, roasts and steaks and dried reindeer meat such as jerky for snacks. For 2015, most of their output will be sold through supermarkets to Greenland’s local domestic market. They had previously sold reindeer meat to Denmark, Sweden, Finland, and Norway.

Greenland’s other reindeer station is primarily a hunting and outfitter. It had only slaughtered 65 head for processing in 2014 (p. comm. Stefan Magnusson).
Chapter Four provides a review of the literature on Indigenous entrepreneurship. It first discusses the field of Indigenous entrepreneurship and then explores how culture and context affect Indigenous entrepreneurship. Next it describes the measurement of success and discontinuation of enterprises. It concludes by discussing Indigenous entrepreneurship and economic development. The research literature about Indigenous entrepreneurship has been drawn from North America, Europe, Australia, New Zealand, and Africa.

4.1 Indigenous Entrepreneurship

The GEM Entrepreneurship Monitor defines entrepreneurship as: “Any attempt at new business or new venture creation, such as self-employment, a new business organisation, or the expansion of an existing business, by an individual teams of individuals, or established businesses” (Reynolds et al., 1993). Thus this definition is not restricted to newly registered businesses.

Indigenous entrepreneurship is an emerging field within the broader entrepreneurship literature. Little research has been done specifically on this area (Dana, 2007; Hindle & Lansdowne, 2005; Hindle & Moroz, 2010; Peredo & Anderson, 2006; Frederick & Foley, 2006; de Bruin & Mataira, 2003). The boundary conditions around what is considered Indigenous entrepreneurship generally depend upon 1) who is considered to be Indigenous and 2) what is considered to be Indigenous entrepreneurship (Peredo, et al., 2004).

Foley (2006, p.8) indicated that the successful urban Australian Indigenous entrepreneurs in his study were, “entrepreneurial in their approach to market development and utilisation of resources. They were independent and created new business in the face of risk and uncertainty for the purpose of profit and growth. Above all, they identified opportunities and assembled resources (resources previously not seen within their cultural circles), and capitalised on these opportunities and resources.”
Hindle and Moroz (2010, p. 15) described the actors and processes. “Indigenous entrepreneurship is activity focused on new venture creation or the pursuit of economic opportunity or both, for the purpose of diminishing Indigenous disadvantage through culturally viable and community acceptable wealth creation.”

How is Indigenous entrepreneurship different from ethnic entrepreneurship? Peredo, Anderson, Galbraith, Honig and Dana (2004, p. 5) clarified three distinguishing criteria. First, Indigenous groups were closely attached to ancestral territories and natural resources, not relative newcomers or immigrants to a particular region or nation. Attachment to ancestral lands and resources was also noted by Berkes and Adhikari (2006). Second, Indigenous entrepreneurship was often connected with community economic development with individual and family enterprises being a component of this while ethnic entrepreneurship was at the individual or family level. Third, where Indigenous peoples had obtained quasi-governmental or “nation state”, the economic factors were more formally and closely linked to broader cultural and political factors. Careful analysis and understanding of history, and “topics of social capital, networks, cognitive styles, technological adaptation, competitive positioning, and entrepreneurial incentives” are important (Peredo, et al., 2004, p. 15).

In Indigenous entrepreneurship, the Indigenous person(s) use enterprise to overcome disadvantage, become self-reliant and have a good life (Peredo, Anderson, Galbraith, Honig and Dana, 2004). The primary motivation for Maori and Aboriginal entrepreneurs was to provide shelter and food for their families (Foley, 2006; Fredericks & Foley, 2006). In Africa, only 2% of all African businesses have 10 or more employees with the majority having one to three employees (McDade & Spring, 2005). Most are necessity entrepreneurs in the informal sector (Naude & Havenga, 2005). The informal economy in most African countries emerged in response to problems of survival, rapid urbanisation, and unemployment (Hope, 2001).

According to Hindle and Moroz, (2010, p. 15), Indigenous entrepreneurship involves new enterprise creation, the pursuit of opportunities, and the creation of
goods and services. Indigenous entrepreneurship does this through “culturally viable and community acceptable wealth creation” (Hindle & Moroz, 2010, p. 8).

Hindle and Lansdowne’s (2005, p. 5) definition had several other important elements. The new ventures were “for the benefit of Indigenous people” and they could be “private, public or non-profit” enterprises. The benefits could range from “economic profit for a single individual” to “multiple, social, and economic advantages for entire communities.” They also indicated “outcomes and entitlements derived from Indigenous entrepreneurship extend to enterprise partners and stakeholders who may be non-Indigenous”.

Indigenous entrepreneurship has increased due to nation building and land claim settlements in countries such as United States, Canada and New Zealand. The clarification of rights, allocation of resources (financial, physical and intangible) which accompanied the settlements provided a foundation for the development of Indigenous enterprises.

Ownership

Indigenous enterprises can take many forms: individual/sole proprietorship, family, cooperatives, community (including band/tribal enterprises), community development corporations and not-for-profits (Anderson, 1999; Bherer et al., 1990; Chiste, 1996; Foley, 2006; de Bruin & Mataira, 2003; Weir, 2007). Other forms of organisation could include ventures in alliance with non-Indigenous investment or entrepreneurship, federally sponsored and controlled activity, or some combination of these of the enterprises (Cornell & Kalt, 1992, p. 9).

Much of the research has focused on Indigenous community organisations located in remote regions or on reservations such as Jorgensen and Taylor (2000) and Cornell & Kalt (1992, 2003). Other researchers have focused on self-employed or sole proprietorships in remote areas such as Wuttunee (1992).

Jorgensen and Taylor (2000) with the Harvard Project on American Indian Development found that tribal ownership of enterprises was correlated with reduced enterprise success even if independent and non-politicised boards were in
place. They attribute this result to the competing pressures between providing profitability and providing other community benefits such as employment and training. Exploitation of Indigenous resources or other tribal comparative advantages did not measurably affect firm success.

The lack of research about Indigenous entrepreneurs living in urban centers doing business on or off reserve has created an incomplete picture (Foley, 2006). Research focused on Aboriginal entrepreneurship in Canada, generally excluded Inuit entrepreneurs. This has provided an incomplete picture as Inuit entrepreneurs are different from First Nations entrepreneurs. They are not covered under the Indian Act, do not live on reserves, and frequently live in remote areas of northern Canada.

According to Weir (2007, p. 21-22), Canada had 27,195 self-employed Aboriginal individuals, or close to 3% of the Aboriginal population in 2001. By 2006, there was a national increase of over 25% to 34,045 (Statistics Canada, 2008). Only 14% of these Aboriginal entrepreneurs lived on reserve. Approximately one-third lived in rural areas. In 2011, the growth rate for Indigenous entrepreneurs was approximately five times that of non-indigenous entrepreneurs (Canada Council for Small Business, 2011).

Researchers in Canada, Africa, Australia and New Zealand found that many Indigenous entrepreneurs do not obtain legal status for their enterprises. They may not see the point of it. Naude and Havenga (2005) suggest biases in tax policy and regulation may cause entrepreneurs in Africa to remain as small firms. Barriers include red-tape, time delays, and high costs for legal and professional fees, business licences, permits, and incorporation. The enterprise may also face multiple taxes from federal, state and local governments (Idam, 2014). These tax policies put an additional burden on Indigenous entrepreneurs who may already face limited access to credit and higher interest rates.

4.2 Indigenous Culture and Entrepreneurship

Entrepreneurship involves recognizing opportunities and organizing the resources to exploit them commercially. Culture, as a contextual factor, can
have a significant effect as it influences entrepreneurial practices (Thomas & Mueller, 2000). Several researchers suggest the need to examine more fully the impact of culture on Indigenous entrepreneurship (Dana, 1995; Lindsay et al., 2005; Foley, 2005a and 2007). Researchers also need to focus on specific cultural contexts (Osland & Bird, 2000; Holtbrügge, 2013).

Hindle and Moroz (2010) report that Indigenous cultural and social norms in Indigenous entrepreneurship research are associated with traditions, history, spirituality, degree of collectivity, effects of discrimination, world view, effect on entrepreneurial capacity, and effect on land and resources. Other aspects of culture associated with Indigenous entrepreneurship include: entrepreneurial traits such as low risk, high uncertainty avoidance, lack of hierarchy, low power distance, high collectivity, low individualism, innovativeness and proactivity; kinship; consensual decision-making; and division of labour based on expertise and responsibility (Lindsay et al., 2005; Redpath & Neilson, 1997).

Fuller, Caldicott, Carincross, and Wilde (2007, pp. 143 - 144) when examining Indigenous culture related to Indigenous enterprise development included: human/land relationships; Indigenous decision making processes; kinship networks (rights, privileges, reciprocal obligations, social interactions, ceremonies, hunting and gathering activities, economic, and political relations); attitudes to economic development, saving, investment, accumulation, and acquisition. Chapman, McCaskill, and Newhouse (1992) found Aboriginal enterprise management in Canada was characterised by group orientation, consensual decision making, group duties, holistic employee orientation and development, and Elder consultation.

Although entrepreneurship is often connected with societies valuing individualism and achievement orientation, a wide range of cultures may facilitate entrepreneurship (Robinson & Ghostkeeper, 1988; Geertz, 1963; Firth, 1969). When Arctic College in Nunavut developed the Inuit business management program, Wihak (2005) reports that although there was extensive anthropological research on Inuit culture no scholarly research had looked at Inuit culture and organisational behavior in business.
Peredo and McLean (2010, pp. 14-15) refer to Harper’s (2003, pp. 140-147) proposition that both individualistic and collective cultures were capable of forming notions of “locus of control” and “self-efficacy” that result in entrepreneurial alertness. Harper (2003, p. 155) suggests, “Cultural differences in self-concepts and values might affect the information sources that people use to form their personal and group efficacy beliefs.” Harper (2003, pp. 157 - 158) notes that in group oriented cultures “alertness typically manifests itself in clan, team-based or corporate entrepreneurship that draws upon the pooled talents of interdependent members in the group… and that the opportunities may be possibly limited …by norms about trading with strangers.”

While many researchers focus only on Indigenous entrepreneurs, Swinney and Runyan (2007) compared Native American and non-Native American business owners in a rural community. They found no significant difference in innovativeness, proactivity, risk taking, and concern with lifestyle and family. Native American entrepreneurs were less individualistic and more collectivistic when compared to non-Native entrepreneurs. Similarly, Garsombke and Garsombke (2000) found Native American entrepreneurs placed a much higher value on community focus and less on individual focus compared with non-Native entrepreneurs.

**Kinship and Social Capital**

Ostrom (2011) indicates social capital is an important concept in Indigenous entrepreneurship and economic development but the idea has received little research.

Foley and O’Connor (2013, p. 279) define social capital for Indigenous entrepreneurs as the:

> Actual and potential resources embedded both within and available through their own socio-cultural networks that to a large degree are determined by their experience of colonisation and the contemporary social environment within the dominant society, as well as their ability to function outside of or within structures of cultural oppression often born of negative stereotypes.
In Indigenous enterprises, social capital is abundantly provided by support systems from community, family, extended family, and tribal or clan relationships (de Bruin & Matairia, 2003). Kinship ties with traditional rulers and chiefs can facilitate deference and favours in social life and business (Dumett, 1983). For Indigenous entrepreneurs, strong kinship ties can provide greater access to Indigenous capital, land, resources, producers, and workers necessary for the development of the enterprise (Dumett, 1983).

Social capital can promote economic action in general but may not be specific to entrepreneurship (Light & Dana, 2013). “To facilitate entrepreneurship specifically, social capital requires supportive cultural capital that directs the social capital to a particular vocational goal, entrepreneurship” (Light & Dana, 2013, p. 16.).

Not every culture values entrepreneurship. The Indigenous entrepreneur’s family may not be supportive of entrepreneurship or forming bridging networks with the dominant society to gain resources (Foley & O’Connor, 2013; Fuller et al., 2007; Light & Dana, 2013). They may see the Indigenous entrepreneur as losing their culture and Indigenous identity (Gallagher & Selman, 2015; Newhouse, 2000; Taiaiake, 2005; Weir, 2007).

Bonding networks are grounded in traditional social capital and cultural heritage whereas bridging networks link the minority and dominant cultures to access resources for entrepreneurship and for many other purposes. The family network may provide access to resources which support the start up of family members’ enterprises. Investing in relationships of trust, employing Indigenous community members, and building social capital over time can create advocates when the Indigenous enterprise has to deal with community politics (Austin & Garnett, 2011).

Garsombke and Garsombke (2000) found that only 13% of Native American compared with 75% of non-Native American entrepreneurs had entrepreneurial parents. Foley and O’Connor (2013), comparing Indigenous entrepreneurs in Australia, Hawaii and New Zealand, found that high levels of education, existence of positive second-generation entrepreneurs as role models, and high
levels of family support for entrepreneurship were important for success. Examples of Indigenous enterprises owned by family members or the community help others to realise the desirability of an entrepreneurial spirit (Madiche et al., 2008; Todd, 2012). Other role models are an important determinant of Indigenous entrepreneurial success (Shoebridge, Buultjens, & Peterson, 2012). Stewart and Schwartz (2007, p. 267) report that respondents from tribally owned firms as compared to non-tribally owned Native American businesses were significantly more likely to report knowing many successful business people of Native American ancestry.

However, kinship obligations may present drawbacks for the success of Indigenous enterprises (Holland, 1996; Foley, 2005b). Family and relatives who may have no investment in the enterprise may demand their share of its proceeds (Pearson & Daff, 2014) or assets that can be used or pawned (di Falco & Bulte, 2011). They may also ask for goods and services at little or no charge (Pearson & Daff, 2014). Credit, if extended, is often difficult to collect from kin (Holland, 1996).

Native American tribal members often felt uneasy with accumulating greater wealth than other members (Malkin et al., 2004 as reported in Pascal & Stewart, 2008, p. 123). Some Indigenous entrepreneurs may pretend to be poor and take out loans even without liquidity problems so they can deny requests from family and friends for financial help (Baland, Guirkinger & Mali, 2007). However, the adverse impacts of kinship obligations decreases as the distance from the home community to the Indigenous enterprise increases (Grimm et al., 2013).

Kinship may also make it more difficult for Indigenous entrepreneurs need to deal with performance of employees who are relatives. They may need to ignore family members taking money or goods; to show leniency for unexcused lateness or absence; and to allow time-off for employees to attend funeral and community events (Pearson & Daff, 2014).

The traditional kinship structure is important to the Inuit in giving, sharing, reciprocity, and exchange of goods and services. It also is important in subsistence and commercial hunting or fishing as the participants depend on
each other’s trust, skills and teamwork (Light & Dana, 2013). With reference to Inuit kinship, Arnakak (2000) comments, “The structure is also the means of transmitting ideas, values, knowledge and skills from one generation to the next. In other words, individual, family and society are linked by the kinship structure.”

However, not all Indigenous people have access to strong kinship systems and association with their traditional communities. These may have been lost through the impacts of colonisation, confiscation of land and resources, forced resettlement, Indian residential schools, fostering children in non-Indigenous homes, disenfranchisement and urbanisation. Foley (2010, p. 70) comments, “In an entrepreneurial context, the […] Indigenous business person is forced to seek social capital, business assets and human capital in business expertise from within the dominant settler society networks”. Furthermore, many new generation Indigenous entrepreneurs have been born and raised in cities. In Canada, the majority of Indigenous peoples now live in urban areas and they are second or third generation urban residents (Environics Institute, 2011). In Africa, Indigenous entrepreneurs who were members of regional enterprise networks identified with their urban community and were several generations removed from their rural villages (McDade & Spring, 2005).

**Culture as a Product**

Many economic development projects emphasise an Indigenous product or service which is associated with a simpler, authentic healthier lifestyle or more recently with a disappearing lifestyle. Association with the Indigenous way of living may contribute to the value of products and services or their attractiveness to consumers (Radcliffe & Laurie, 2006; Ryan & Aiken, 2005; Stewart et al., 2014). Niches may develop such as ethno-agriculture, organic agriculture, ethno-biology, clothing, tourism, crafts, and music. Crucial preconditions for these Indigenous enterprises include reasonable access to markets (North & Cameron, 2000).

Indigenous ownership of the resource, production, and distribution are important to capture the value. However, “the fields of biotechnology, bio-
prospecting, intellectual property rights and exploitation of medicinal plants [and animals] offer less secure ownership (Radcliffe and Laurie, 2006, p. 242). Cuerrier et al., (2012, p. 254) report the theft and misuse of traditional knowledge in the past led communities to be distrustful when entering into relationships.

However, the abilities of Indigenous peoples to preserve their culture and present authentic cultural experiences may have been negatively affected by colonists suppressing or causing its disappearance (Chang, Wall & Hung, 2012). To gain recognition, development and market attention; traditions may be reinvented or imagined to shape the “Indigenousness” (Radcliffe & Laurie, 2006). The Sámi are suggesting this actually is negatively impacting their culture’s sustainability (Pettersson & Viken, 2007). On the other hand, tourism may be used as a tool for language and cultural preservation and education for non-Indigenous and Indigenous peoples (Colton & Harris, 2007; Lynch et al., 2010; Whitford & Ruhanen, 2009).

Another issue involves the taking, copying and selling of both real and imitations of traditional crafts, items of cultural heritage and even oral traditions. For example, M’Closkey (2014, abstract) states, “80% of the 1.5 billion dollar sales annually of [Native American] ‘Indian’ products is fabricated and imported into the US.” Indigenous people are upset about the loss of monetary value. In Canada, Pauktuutit Inuit Women’s Association (PIWA) represented the concerns of Inuit women about intellectual property rights and traditional designs to the United Nations and organised information workshops in northern communities (Ridout, 2003). Traditional items, sites and landscapes may be sacred and ceremonial within a specific Indigenous community. Indigenous people are “gravely anxious that some segments of their culture are being destroyed, mutilated or debased by outsiders” (Battiste & Henderson, 2004, p. 159).

The emphasis on material culture tends to focus on the ‘traditional’ or ‘classic’ forms, thus suppressing changes that have occurred over time. Therefore, the culture may be seen as static or non-modern.
4.3 Success in Indigenous Entrepreneurship

The measurement of success is culturally determined. The success of a business in non-Indigenous cultures is often measured by numerical indicators such as financial performance and profitability, growth rate, business size (number of employees), expanded business premises, and accumulation of equipment and other capital assets. Profit is associated with accumulating and acquiring possession. With many Indigenous entrepreneurs, financial success is also important for survival. For example, Ghanaian women entrepreneurs reported financial success was an important means of providing for the financial security, education and care of their nuclear and extended family (Dzisi, 2008).

However, Indigenous entrepreneurship may emphasise broader measures such as quality of life rather than profit-orientation (Wuttunee, 1992; Redpath & Nielsen, 1997; Dana, 2007; Foley, 2005; Kayseas, 2009). More importance can be given to self-fulfillment, emotional well-being, sense of achievement, pride in one’s work and performance (Dzisi, 2008). Dana’s (1995, p. 78) study of entrepreneurship in a Canadian sub-Arctic community found the people traditionally worked and shared collectively and disliked competition. In successful small businesses in northern Canada, Wuttunee (2004, p. xiv) and found “profit was only one measure of success, […] supporting their families in a chosen lifestyle, meeting the needs of the community, and being happy with their choice of occupations” were also important.

As a result, Lindsay et al (2005, p. 2) state “what constitutes an opportunity from an Indigenous perspective (one that benefits the community in terms of economic and non-economic returns) will differ from what constitutes an opportunity from a non-Indigenous perspective where the focus is on economic returns to the individual entrepreneur and shareholders.”

Indigenous entrepreneurs often create new jobs, develop skills in the community, revitalise businesses owned by relatives, and create business opportunities. Indigenous entrepreneurs also reported social contributions to their communities as a measure of success including volunteerism, participation in community
organisations, sponsorships and donations (Dzisu, 2008). Another contribution included the ability to identify and nurture community leaders (Mapunda, 2007; McDade & Spring, 2005).

**Discontinuation or Failure**

Not much is known about failure rates for Indigenous enterprises (Altman, 2001). Low educational levels, lack of skills and lack of knowledge and experience with business and entrepreneurship have contributed to the failure of Indigenous enterprises. There may be no community development financial institutions, business incubators or not-for-profit organisations which could provide entrepreneurship education.

When comparing Indigenous and non-Indigenous entrepreneurs, Garsombke & Garsombke (2000) found no significant difference in behavioural characteristics like “hard work”, “customer orientation”, “good business sense”, “competitive pricing” and “high quality”. Frese (2000), in a comparison of five African countries, found that personal initiative, innovativeness, entrepreneurial orientation and autonomy differentiated successful from less successful Indigenous entrepreneurs.

Cultural focus has been linked to an increase in the use of community enterprises and also an increase risk of business failure. Frederick and Foley (2006, p. 9) indicate that Indigenous “business failure is inevitable” because social and cultural demands override profit orientation and asset accumulation. The researchers add, “Cultural demands can in certain scenarios determine the use of funds rather than prudent financial management.”

Dana and Honig (2008) use the term “dis-entrepreneurship” when describing the failure of community enterprises as a result of geographic isolation, lack of infrastructure, failure in community leadership, and failure to adequately diversify the economic environment. Saku (2002) suggests Indigenous economic development arising from northern land claim settlements in Canada could lead to business failure if there was low local investment of the capital or little business stimulation.
Entities external to Indigenous people can disrupt culturally determined opportunities (Dana, 2007, p. 5). Indigenous people may wish to be self-employed but find themselves pushed to other money-earning activity, out of necessity. For example, Dana and Riseth (2011, p. 117) comment “self-employed Sámi people in Finland have been pulled to community-based reindeer herding because of social conditioning including a close relationship with animals, but pushed into individualistic secondary enterprises, in order to make a living without leaving their traditional area.” Researchers on Sámi reindeer herding have illustrated the differential impact of national government legislation and policies in Finland, Norway, Sweden, and Russia. Reinert (2006) in Norway found Sámi reindeer meat production, traditionally at the core of their culture and economic livelihood, was lost because government officials misunderstood the economics of reindeer herding and the changing regulatory environment.

Government policies also affect communal ownership of land, water and resources. For the Maasai in Africa, this has threatened their pastoral communal system of semi-nomadic livestock herding. Division of land into group ranches and privately owned parcels, creation of protected areas, leasing land for large-scale cereal cultivation, and fencing have blocked the Massai from freely accessing water and grazing resources (Ndemo, 2005; Thompson & Homewood, 2002).

De Bruin and Mataira (2003) link Indigenous culture with the concept of heritage entrepreneurship whereby Indigenous people undertake activities designed to regain control of their ancestral lands thus expanding their economic capital base. De Bruin and Mataira define heritage as cultural practices, resources and knowledge systems developed and refined and passed on through generations (2009, p. 170). They include examples of direct negotiations and achievement of settlement, methods to fast-track settlements and implementation; development of an Indigenous trademark as an identification and brand for Indigenous products and services; and attempting to protect Indigenous culture and intellectual property rights.
4.4  Indigenous Entrepreneurship and Economic Development

Many Indigenous peoples live in poverty. Nations are recognizing the disparity in socio-economic conditions of Indigenous peoples. As a result, Indigenous entrepreneurship is seen as a means to dramatically improve the economic and social positions of Indigenous peoples. Indigenous entrepreneurship has been called the second wave of Indigenous economic development (Peredo, et al., 2004). Economic development policy therefore focuses on market-based or entrepreneurial approaches at the grass roots level to facilitate value creation processes by private investors, the local investment, and risk-taking (Clarke & Gaile, 1992). Loizides and Wuttunee (2005, pp. I, 2) argue that the status quo is no longer acceptable and recognizing aboriginal cultural values such as community capitalism is critical.

Indigenous groups and communities throughout the world vary greatly in willingness, readiness and approaches for entrepreneurship and economic development (Adamson & King, 2002; Cornell & Kalt, 2003; Peredo, et al., 2004; Wuttunee, 2004; Anderson, et al., 2007). Indigenous communities can choose to focus internally for economic development by meeting community needs (Cornell and Kalt, 1992; LaDuke, 2011). Anderson, Dana and Dana (2006) propose that Indigenous people can choose one of four approaches to economic development – opt in ranging from zero to radical transformation or opt out with zero to radical transformation. Therefore, the local Indigenous community must learn from others and use models and proven approaches in making their decisions about economic development opportunities.

The mode of development that emerges is a result of the particular community’s use of integrating, transforming, and excluding mechanisms as it deals with: 1) the corporations which they supply or serve as customers for; 2) the “state” or “government” at the local, sub-national, national and international level; 3) the non-government agencies and special interest groups in the civil sector, and 4) the global and supranational bodies such as NAFT, the EU, the WTO and the UN (Peredo et al., 2004).
Previous economic development approaches driven by governments have often failed. Agrawal (1995, p. 432) suggests these had not involved the Indigenous communities. Failure also occurs because these approaches were imported from the non-Indigenous world without adjustment for the local Indigenous culture and context (Hindle & Moroz, 2008). The model Hindle and Moroz (2008) propose uses the metaphor of a bridge. The community pillar consists of physical resources (land and infrastructure), governance and institutions, property rights and capital management. The process pillar consists of human resources (demographics and human capital), world view and social networks, and boundary spanning mechanisms. Therefore, the entrepreneurial processes are conditioned by the community context and differ from one community to another.

The First Nations Development Institute (FNDI) uses sixteen elements organised in a Medicine Wheel and refers to this as the Elements of Development Model (Black, 1994). The circles moving from the internal to external represent the individual, the project, the community and the tribal nation. The circles within circles demonstrate the interconnectedness of all things and the balance of life. There are sixteen elements organised into four quadrants representing major relationship in economic development: spirituality, self-confidence/personal efficacy, control of assets, and kinship. The remaining elements within the circle’s quadrants are environment balance, hope & future orientation, choices/vision, cultural integrity, social respect, political and civic participation, health and safety, responsibilities and consequences, vibrant initiative, productivity skills, income, trade and exchange.

Many Indigenous peoples throughout the world access the commons for natural resource in wildlife-based enterprises (Berkes & Davidson-Hunt, 2009). These Indigenous enterprises can include objectives of conservation (Lichtenstein, 2010) and maintaining biodiversity (Berkes & Davidson-Hunt, 2009). With regard to developing enterprises based on wild plants and animals in the Northern Territory, Australia; the level and type of interest differed for Indigenous peoples of three communities reflecting differences in culture and history (Zander, Austin & Garnett, 2014).
Indigenous people are generally thought to have deep connections to their communities, ancestral lands, and tribes or clans. Tennant (1991, p. 4), states “contemporary communities and tribal groups have the same connection with the [ancestral] land as did those same communities and tribal groups had at contact.” As discussed earlier, these connections may no longer exist for urban Indigenous entrepreneurs.

Indigenous entrepreneurship and economic development must be aligned with the social, organisation and culture of the tribe (clan) or community. Therefore, they need to be controlled and developed by the community within the sanction of Indigenous culture (Robinson & Ghostkeeper, 1987 and 1988; Cornell & Kalt, 1992; First Nations Development Institute, 2004; Begay et al., 2007). Foley (2005, p. 245; Foley, 2000, p. 11) comments, “The Indigenous […] entrepreneur alters traditional patterns of behavior, by utilising their resources […] forcing social change in the pursuit of opportunity beyond the cultural norms of their initial economic resources” [underlining is mine for emphasis]. This reinforces the discussion earlier where Indigenous cultures are innovative and adaptive rather than static.

Indigenous knowledge systems and skills may also offer comparative advantage for Indigenous entrepreneurship (see Watt Cloutier, 2003). Schaper (2007) suggests these could include small scale arts and crafts, harvesting, and crop production. However, the scale could increase dramatically if they commercialise their Indigenous traditional knowledge of plants and animals as traditional medicines for use in healthcare. In 2009 the World Health Organisation Resolution 62.13 (2009) ensures the preservation, research and inclusion of traditional medicines in healthcare systems.

A set of preconditions significantly determine the likelihood of an enterprise based on wild plants and animals continuing (Austin & Garnett, 2011; Austin & Corey, 2012). The enterprise must build on local assets and skills (Peredo & Chrisman, 2006). The resource needs to be resilient to commercial-scale harvest and ecologically sustainable (Lichenstein, 2010; Berkes & Tikaram, 2006). The market opportunity needs to from a unique economic niche, of high value and
suitable scale to overcome the high costs of production and transportation due to remoteness and distance from markets (Cornell & Kalt, 1992). The public needs to find the commercial use of the species acceptable (Zander et al., 2014, Altman & Whitehead, 2003). The local Indigenous people need to find it culturally acceptable to the use that particular species for that specific commercial purpose (Meis Mason, Anderson & Dana, 2012). Indigenous people must have genuine control over the decision making and use of their resources and relations with the outside world (Cornell & Kalt, 1992). Indigenous people need ready access to the resource, enterprises need sufficient social capital (particularly of the bridging kind), and the institutional context needs to be supportive of Indigenous entrepreneurship (Austin & Garnett, 2011).

Physical, political/legal and financial infrastructures may create barriers for the development of Indigenous entrepreneurship. In Africa, poor quality physical infrastructure was linked with electricity, water, roads, waste disposal, telecommunications, police, trucking, postal services and air freight services (Agboli & Ukaegbu, 2006). In Northern Canada, Indigenous entrepreneurs face many similar problems with infrastructure (Myers & Forrest, 2000; RCAP 1996a and 1996b; NAEDB, 2007). Weak physical infrastructure may negatively affect enterprise performance by increasing costs for services; increasing costs to bring in goods and services; causing delays, damage and losses as a result of faulty or interrupted services; and preventing the ability to obtain certification for health, hygiene and safety.

A big challenge for an Indigenous enterprise may be finding a building for its premises. Many aboriginal communities and reserves have limited retail or industrial buildings. To obtain a permit to lease an existing building or construct a new building or to lease or buy land may be difficult. If Indigenous lands are held in trust, the Indigenous entrepreneur may only lease space and have little incentive to repair or make improvements. In efforts to obtain space, the Aboriginal entrepreneur may also lease inappropriate facilities which may be in poor condition. The lack of space may also discourage Indigenous entrepreneurs from returning to their communities or reserves (Cornell et al., 2007: FNDI, 2007).
Indigenous enterprises in remote or isolated areas often face long distances, poor infrastructure, challenges accessing suppliers, small markets, and weak connections to consumers located in larger markets. Clusters of related and complimentary enterprises often can improve performance and survival (Cope, 2002; Wang, Madhok & Li, 2014; Jacobsen & Tiyce, 2014). Clustering is “a process whereby enterprises within a shared value chain, cooperate and manage the flow of goods and services from the point of origin to the point of consumption” (Cope, 2002, p. 3). With today’s emphasis on sustainability and responsible stewardship, I would change from the “point of consumption” to the “point of disposal”.

Clusters can facilitate entrepreneurship by lowering the start-up costs, enhancing opportunities for innovation and allowing for the development of technology, skills and training, shared infrastructure, specialised suppliers, product differentiation and product quality (Delgado, Porter & Stern, 2010; Wang, Madhok & Li, 2014; Jacobsen & Tiyce, 2014). Therefore, the same industry evolves in distinct evolutionary paths in different places and with different outcomes (Wang, Madhok & Li, 2014). Native American entrepreneurs located near economic clusters were more successful, even when they were located on reserves (Pascal & Stewart, 2008). Indigenous women entrepreneurs in northern Australia overcame the barrier of distance to markets by developing strategies to sell their products in larger centers and by creating their own websites (Pearson and Daff, 2014).

Several researchers in Africa have noted the following political/legal issues are negatively associated with Indigenous entrepreneurship: high taxes and costs of permits, burdensome administrative paperwork and long delays, requirements of ‘gifts’, confiscation of land and resources, unclear property rights, and unfair administration of justice (Tshikuku, 2001; Abimbola & Agboola, 2011; Mambula, 2001; Azmat & Samaratunge; Kiggundu, 2002). Often Indigenous communities lack land use policies or zoning, commercial codes, economic or commerce departments, and leadership which have familiarity with private enterprise (FNDI, 2007).
Limited access to funding is a factor for both Indigenous and non-Indigenous entrepreneurs (Garsombke & Garsombke, 2000). Most Indigenous entrepreneurs depend on their own and extended family for savings to start up their enterprises. In Canada, half of self-employed entrepreneurs started up without borrowing funds (Todd, 2012). Access to capital remains a challenge as many are unable to obtain loans from financial institutions or if they do so, these are at high interest rates (Kiggundu, 2002; Naude & Havenga, 2012). Indigenous entrepreneurs may actually find that financial success results in a reduction in financial or program support resulting in negative net benefit (Russell-Mundine, 2007). Another challenge is that predatory money lenders charge extremely high rates and strip assets away (FNDI, 2007, Azmat & Samaratunge, 2009).

In Canada and the United States, financial institutions are often unwilling to lend money to Indigenous peoples, especially if they are on a reserve or in an Indigenous community because of problems collecting and foreclosing on loans. Tribal lands associated with reserves are held in trust by the federal government and cannot be used as collateral (FNDI, 2007; Weir, 2007). Furthermore, decisions by the local Indigenous leadership which affect lands or money generally require a vote of tribal or band members (whether they live on reserve or not). Often Indigenous entrepreneurs are denied because they have no or poor credit histories.

Frequently Aboriginal communities or reservations lack access to financial institutions. Since the 1980’s, banks and credit unions in Canada began lending to Aboriginal people. Aboriginal financial institutions such as Peace Hills Trust, The First Nations Bank of Canada and the Aboriginal Capital Corporation were created. However when the Canadian government started delivering the Indian Residential School Common Experience Settlements, they found many aboriginal people lacked accounts to deposit the checks (Meis Mason & Leenders, 2010). In Australia, First Nations Advantage Credit Union was named by the World Council of Credit Unions as the most significant credit union in the world today (Hindle, 2005).
Indigenous-owned enterprises are also faced with competition for limited funds and limited consumer markets from nearby non-aboriginal communities in Canada and the United States (Weir, 2007; FDNI, 2007). African entrepreneurs reported facing competition from other ethnic groups for funding (Dana, 2007).

Helin (2006) referred to the impact of the demographics of Aboriginal peoples in Canada as an “economic bomb” (p. 53) or a “demographic tsunami” (p. 60). Loizides and Wuttunee (2005) indicated that the high unemployment and dependency on government funding in Aboriginal communities in Canada cannot be continued. In discussing the creation of wealth and employment, they pointed out the need for strategic community economic development plans to establish and grow business enterprises.

A number of methods can be used to stimulate successful Indigenous entrepreneurship: public recognition of successful Indigenous entrepreneurs, promoting promising stories, and providing culturally appropriate entrepreneurship skills training for adults and youth (Weir, 2007). Support from larger businesses through sub-contracting, breaking contracts into smaller pieces, and assisting with bonding are useful (Lindsay, 2004; Meis Mason, Dana & Anderson, 2012).

Interestingly, the Nigerian Igbo are noted for extensive entrepreneurship wherever they are located. They draw their capital mainly from personal savings, a grant from a master after apprenticeship, support from family, loans from Esusu clubs or age grade organisations, and funds from patrons or the trading diasporas (Nnadozie, 2002).

To conclude, Chapter Four has provided a review of the Indigenous entrepreneurship literature by discussing the definition of entrepreneurship, how culture affects Indigenous entrepreneurship and why Indigenous entrepreneurship and economic development are important.
5 Research Methodology

Chapter Five describes the research methodology literature, justifies the design choices, and then outlines the research approach used. Section 5.1 introduces the approaches used to search the literature. Section 5.2 discusses the choices in the research design and process including the western science approach, qualitative research using comparative cases, site selection, unit of analysis, research questions, sampling, triangulation, participatory observation, language, interviews and notes, and data analysis techniques. In Section 5.3, I address aboriginal epistemology, Inuit Qaujimatuqangit (IQ) or traditional knowledge, Aboriginal research relations, and guidelines for conducting Aboriginal research. In Section 5.4, I detail the applied research methods such as research ethics approval, elder consultation, research licenses, permissions and letters of support; and gaining entry. I conclude the chapter with Section 5.5 which explains data collection in each site.

Gibb (1992) suggests using a stepwise or staged approach for research on small business to ensure that high quality research results are achieved. For ease of presentation, I show a linear overview of the steps used for my thesis research in Figure 5.1. However, my approach has been cyclical, reflective and complex. Often, I could not ‘see’ my way clearly. To deepen my understanding, I made many visits to Elders and Indigenous peoples, visits to literature to understand interpretations, visits to supervisors and colleagues to dialogue, and visits to the interviews, ‘data’, analysis (Arbon, 2008).

5.1 Literature Review

The research started without a preconceived theory but built the framework based upon systematic data collection (Strauss and Corbin, 1998; Denzin and Lincoln, 2005; Merriam, 2009; Corbin and Holt, 2011; Creswell, 2011). Prior to going to the communities, I developed an understanding of the traditional and current uses of caribou/reindeer and read about the community’s history. I also tried to identify key players. After the visits to the community, I used the approach suggested by Glaser and Strauss (1998) and Strauss and Corbin
Figure 5.1 Summary of My Research Approach

- **Researcher Preparations and Cultural Protocols**
  - Consulting Elders and the communities
  - Personal Analysis
  - Reflecting

- **Research Preparation**
  - Reviewing literature
  - Checking regulations & guidelines regarding Indigenous research
  - Designing research
  - Preparing project description and consent forms (see Appendices 4-6)

- **Ethics**
  - Obtaining university research ethics approval
  - Discussing at Elders Council
  - Obtaining letters of support
  - Obtaining local community/government permission for field visit
  - Obtaining government/Indigenous permission & research licenses
  - Reflecting if work was done in a ‘good way’

- **Gathering knowledge**
  - Inviting local community organisations & enterprises to participate
  - Contacting enterprises and key people at field site
  - Performing field visit
  - Meeting with local government administrator, economic development officer, key business & community leaders
  - Employing local interpreter
  - Meeting with oldest clan leader (if required)
  - Announcing research on radio, newspaper & bulletin boards
  - Inviting participation from the community members
  - Walking community
  - Conducting interviews & observing
  - Providing thank you notes, honoraria, and gifts
  - Transcribing interviews
  - Visiting cultural centres, museums, businesses, galleries
  - Sharing at conferences

- **Making Meaning**
  - Transcribing interviews
  - Performed within case and cross-case theme analysis
  - Writing descriptive cases
  - Gathering feedback
  - Visiting further the literature & dialoguing with Elders, Indigenous peoples, supervisors, colleagues
  - Reflecting, dreaming, asking for spiritual guidance
  - Linking to literature, developing assertions and generalisations

- **Giving Back**
  - Giving participants photo, interview, case, articles (ongoing)
  - Sharing published materials with communities (ongoing)
  - Giving service with Indigenous communities (ongoing)
  - Mentoring

(1998); I first examined the data from the interviews, observations and documents looking for important categories and their properties, conditions, and consequences. Rather than proceeding in a linear fashion, I went back and
forth, compared cases, and drew on the literature (Patton, 1990). The method ensured that the data reflected the personal experiences of Inuit and Sámi entrepreneurs, Elders, community members, government representatives and leaders, and documentary evidence.

When searching high ranking journals for articles referring to Indigenous entrepreneurship, Hindle and Moroz (2010) used the keywords: Indigenous, aboriginal and native. In performing the literature review, I did internet searches using Google Scholar and database searches using ProQuest, OLC WorldCat, ECO, and ArticleFirst. I also searched the electronic databases for the federal, provincial and territorial governments in Canada and special collections for major university libraries in Canada such as the Arctic Institute of University of Calgary, the Northern Research Institute of the University Manitoba and the Prince of Wales Library of the Northwest Territories and the Hudson Bay Company Archives in Manitoba.

Examples of the keywords and combinations used for the initial searches are outlined in Table 5.1. I also focused on Inuit communities in Nunavut, Quebec, and Labrador that held commercial caribou licenses. First Nations like the Cree in Quebec, the Innu in Labrador or the G’wichen, Sahtu, or Dene in the Northwest Territories were excluded. One problem I encountered was that most of the articles I read about the Inuit in Northern Canada were written by archaeologists, anthropologists, biologists, lawyers, political scientists, social workers and community developers. Few had a business perspective.

Searches were performed using the community, company names, chamber of commerce, and local development corporations. Once key decision makers in the organisation were identified, these names were searched. For example, for Kivalliq Arctic Foods in Nunavut, terms included Tundra Brand Caribou, Keewatin Meat and Game (or Fish), Tunik or Tunniq Enterprises, Rankin Inlet, Coral Harbour, Southampton Island, Coral Harbour Development Corporation, Nunavut Development Corporation, Aiviiit or Coral Harbour Hunters and Trapper Association, Kivalliq Chamber of Commerce, Rankin Inlet Chamber of Commerce, and the Friendship Centres.
Community names have changed over time thus search terms needed to be adjusted. For example, terms for Inukjuak, Nunavik included Port Harrison, Inoucdjouac, Inuksuak or Kongoak.

I revisited the literature on many occasions both before and after visiting the communities. Based upon reviewer feedback, I also broadened the literature to include Sami in Norway and Finland and other Indigenous peoples in Russia, Greenland and Alaska, USA. To deepen my perspective, I looked at Indigenous entrepreneurship literature from Africa.

<table>
<thead>
<tr>
<th>Table 5.1 Examples of key word searches</th>
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<tbody>
<tr>
<td>Inuit, Eskimo, Esquimaux, Aboriginal, Indigenous</td>
</tr>
<tr>
<td>Arctic Canada, Northern Canada, Small Business/Enterprise/Entrepreneur(ship)</td>
</tr>
<tr>
<td>Cottage Industry; and Economic Development</td>
</tr>
<tr>
<td>Caribou + meat, + processing, + harvest(ing), + products, + antlers, + sex organs, “Caribou meat” + marketing</td>
</tr>
<tr>
<td>Caribou + traditional economies</td>
</tr>
<tr>
<td>Caribou + Inuit Traditional Knowledge</td>
</tr>
<tr>
<td>Caribou + economic development</td>
</tr>
<tr>
<td>+ NWT, + Nunavut + Labrador, + Quebec, + Arctic</td>
</tr>
<tr>
<td>Caribou + Sustainable Development</td>
</tr>
<tr>
<td>Caribou + export, + trade</td>
</tr>
<tr>
<td>Caribou + Inuit + culture</td>
</tr>
<tr>
<td>Traditional + “country foods” + NWT, + Nunavut + Labrador, + Quebec, + Arctic</td>
</tr>
<tr>
<td>Country food + NWT, + Nunavut + Labrador, + Quebec, + Nunavik, + Arctic</td>
</tr>
<tr>
<td>Commercialisation + caribou</td>
</tr>
<tr>
<td>Commoditisation + caribou</td>
</tr>
<tr>
<td>Inuit + subsistence/vernacular economy</td>
</tr>
<tr>
<td>Sámi, Saami, Northern Sweden Norrbotten, Sweden, Jokkmokk.</td>
</tr>
<tr>
<td>Reindeer + meat, + processing, + harvest(ing), + products, + antlers, + sex organs, “Reindeer meat” + marketing</td>
</tr>
<tr>
<td>Reindeer + Sámi Traditional Knowledge</td>
</tr>
<tr>
<td>Reindeer + economic development + enterprise + industry + entrepreneurship</td>
</tr>
<tr>
<td>Reindeer + export, + trade</td>
</tr>
<tr>
<td>Reindeer + Sámi + culture</td>
</tr>
<tr>
<td>Other Indigenous Peoples and Reindeer or Caribou:</td>
</tr>
<tr>
<td>Aleut, Yu’pik or Inupiak, Alaska Native</td>
</tr>
<tr>
<td>Greenlandic Inuit, Sámi./Saami + Finland, Norway, Russia</td>
</tr>
<tr>
<td>Nenet, Yamal, Russia, Siberia</td>
</tr>
</tbody>
</table>
5.2  **Research Design Choices**

5.2.1  **Western Science and Indigenous Knowledge**

Euro-Canadians are strongly influenced by the western science approach. Agrawal (1995, pp. 423-424) describes the western science approach as open, systematic, objective, value-free, and analytical, and advancing by rigorously building on previous achievements. In this approach, researchers attempt to completely separate from the object(s) of their investigations—thus the objects become “subjects.” Researchers set out to remain unbiased, objective, and impartial, and try to keep their values, biases, and worldview from influencing their conclusions (Patton, 1990).

When using the western scientific approach, the researcher formulates a hypothesis, designs the research to test the hypothesis, performs the research in a step-wise or linear fashion to produce knowledge, analyzes the data, judges the hypothesis as right or wrong, and then makes reasoned generalisations or conclusions (Dyck, 1998). Intuition does not have a place in this process. By following the scientific method, researchers suggest the results will be accurate, predictable, and repeatable.

Because knowledge is compartmentalised into disciplines and sub-disciplines (which are often housed within different faculties and departments at universities), the western science approach may result in narrow and fragmented views (Rist & Dahdouh-Guebas, 2006, p. 471). Learning is acquired usually through written or published works. Dyck (1998) referred to Kuhn’s *The Structure of Scientific Revolutions* which pointed out that the ever changing nature of science is hidden because scientific textbooks are rewritten and revised, removing the old knowledge and theories as if they did not exist.

Western science researchers have often marginalised Indigenous peoples by ignoring them, or by trivializing their customs, traditional knowledge, ways of life, and governance structures. Researchers decide what is true and false, what is included as knowledge, and what is excluded as superstition, spirituality, or
ignorance (Helander & Kailo, 1998; Nadasdy, 1999, 2007; Alfred, 1999; Battiste, 2000; McConaghy, 2000; Cant, 2005; Helin, 2006). Oral histories or teaching, the basis of Aboriginal history and learning, have usually been excluded as valid information sources (RCAP, 1996a, p. 32).

After comparing Indigenous and western scientific knowledge, Agrawal (1995, p. 433) suggested, “It makes much more sense…to talk about multiple domains and types of knowledge with differing logics and epistemologies.” Because of the richness and complexity of cultures, it is difficult to make distinctions and the two approaches to developing knowledge illustrate that “there are different ways of expressing ideas that, at a deeper level, may have much in common” (RCAP, 1996a, 35).

More recently Indigenous traditional knowledge and methodologies have become recognised for the value of their contributions. For example, Forbes (2011, p. vii) states, “Efforts to understand, manage, and respond to change in Arctic coastal systems may benefit from the integration and complementarities of both [scientific and Indigenous traditional knowledge] approaches.”

Indigenous communities in general embrace holistic perspectives - all things are living, interconnected, functional, and adaptive to changes in the social and natural environment. Humans are a part of all other life and spirits. Thus, the relational nature of Indigenous epistemology acknowledges the interconnectedness of the physical, mental, emotional, and spiritual aspects of individuals. It also connects individuals with all living things and with the earth, the star world, and the universe. Indigenous epistemology is fluid, nonlinear, and relational (Kovach, 2005).

Time is viewed as cyclical and renewal is an important component. Indigenous knowledge is transmitted through many generations by learning through listening (Rist & Dahdouh-Guebas, 2006). Knowledge can be transferred from the ancestors in the spirit world through visions, dreams, revelations, and intuition (Lavallée, 2009). Indigenous knowledge is approached through both the senses and intuition (Cordero, 1995). Local people also acquire Indigenous knowledge through daily experiences (Dei, Hall & Rosenberg, 2000). Thus, it is
unique to a given culture, locality and society. However, this may result in viewing each situation as unique and each development struggle as localised and specific not recognizing that other Indigenous peoples throughout the world face similar issues and struggles (Briggs & Sharp, 2006).

The complexity of Indigenous knowledge can make it difficult for people raised in the western science approach to understand it, particularly if they do not speak the local Indigenous language and understand the local culture. Difficulties can also occur when practices based on Indigenous knowledge are different or challenge what the western scientific approach currently accepts as true. Practices related to Indigenous knowledge need to be examined carefully to determine if they are still appropriate today (Briggs & Sharp, 2006). Researchers must also be careful when capturing the Indigenous knowledge that it is not presented as frozen, static or unchanging.

In concluding this section, I will discuss the importance of respect, relations and reciprocity in Indigenous research. Additional concepts of Indigenous knowledge are discussed in sections 5.2.12 and 5.2.13.

Relations are core to Indigenous research. Wilson (2008, p. 58) suggests that “all things are related and therefore relevant.” Research must be guided by respect, reciprocity, and relations (Steinhauer, 2001, p. 8 citing Cora Weber-Pillwax). Respect means intently listening and hearing using more than the ears and acting with sensitivity (Atkinson, 2001, p. 10). According to Brearley, Calliou and Tanton (2009, p. 4), “Deep listening describes a way of learning, working and being together. It is informed by the concepts of community and reciprocity. It means listening with a sense of responsibility to stories that are told. It also means listening and observing the self as well.” Therefore it is nearly impossible for a researcher working in Indigenous communities to remain objective, unbiased and neutral. In fact, Wilson (2008, p.77) comments, “What is more important and meaningful is fulfilling a role and obligations in the research relationship – that is being accountable to your relations. The researcher is therefore part of his or her research and inseparable from the subject of that research.
Reciprocity or giving back requires further description. Reciprocity takes place on many levels over time. The participant’s knowledge is a gift. Many participants expressed the importance of the research and being allowed to tell their story. Another aspect of the reciprocity involves giving voice to the participants. During the reviewing processes, I have been told to condense the voice, refocus on the analytic tables, remove any comments which were not related to meat processing, and only include one Canadian community. I carefully considered the advice but felt it was important to retain the voices in their original format.

To demonstrate respect for this gift of knowledge, reciprocity also means obligations to give back what was learned and to ensuring it assists the community (Kovach, 2009). This has involved capacity building, reconnecting with the research participants, providing digital copies of the interview which they could share with their families, giving copies of my published articles translated into their language, providing service, and mentoring. I have also shared learning from my readings, field visits and conferences with various community members.

So where does this position me as the researcher? I was trained in the western science approach. I am not an aboriginal person although members of my family circle are. I have deepened my understanding of Indigenous knowledge and research methods. I have taught business management in Indigenous communities. I have learned from Indigenous scholars and researchers. I believe we have much to learn from western scientific and Indigenous approaches. However, it is not possible for me to conduct and present this research as an Indigenous researcher would.

5.2.2 Use of Qualitative Research

Acs and Audretsch (2005, p. 9) comment that “entrepreneurship research is in its infancy.” This is especially true with respect to Indigenous entrepreneurship (Peredo et al., 2004; Hindle & Lansdowne, 2007; Anderson et al., 2007; Dana, 2007; Hindle & Moroz, 2010). Much more high quality research needs to be
done in this area (Huse & Landström, 1997; Gartner & Birley, 2002; Hindle, 2004).

A qualitative research approach is appropriate for exploring, describing, and explaining topics about which relatively little is known (Lincoln & Gruba, 1985; Strauss & Corbin, 1998; Creswell, 2007; Merriam, 2009; Bryman, Bell, Mills, & Yue, 2011). Such research helps to identify, understand, and define important variables (Cooper & Emory, 1995). Merriam (2009) suggests qualitative research can simply seek to discover and understand a phenomenon, a process or the perspectives and worldviews of the people involved. A qualitative researcher interprets the real world from the perspectives of the individuals who are providing the information (Filstead, 1970). Caelli et al. (2003, p. 19) note that qualitative approach is strengthened when researchers note their position, distinguish the method and methodology, make explicit the approach to rigor, and explain the analytic lens.

5.2.3 Use of the Comparative Case Method

I have a preference for hearing stories and gaining insights from wisdom that real people share. I had previously done case study research but felt the techniques I had learned could be improved upon. Furthermore the Inuit and First Nations people in Canada use story telling a method of teaching and also wish to hear about promising practices.

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clear (Yin 2003). An in-depth case study is appropriate when exploring and trying to gain an understanding of key dimensions (Ellram, 1996; Eisenhardt & Brown, 1998; Eisenhardt & Graebner, 2007; Jensen & Rodgers, 2001; Kim, 2002; Rowley, 2002; Stake, 1995; Tellis, 1997; Yin, 2003). Case research methods are useful for analyzing changes, as they ask “why’s” and “how’s” (Yin, 2003). They can also capture real-time events as they are taking place (Brundin, 2007). Case research has been used in the context of the firm, firms, or industries and changing vertical and horizontal market structures of many agri-food industries (Westgren & Zering, 1998). Both the harvesting and
processing of caribou and reindeer fall within the Canadian and Swedish governments’ agriculture and agri-food policies; thus the case method is pertinent.

Since much of the research on Indigenous entrepreneurship and economic development involves single case studies, only limited generalisations can be made (Hindle & Moroz, 2010; Ostrom 2011). Eisenhardt (Kim, 2002, p. 3), points out that “At four, five, six, or eight cases, a researcher really begins to see the regular phenomena that are really difficult to tease out of a single case […] Four is the minimum […] when repeated insights and patterns begin to emerge.” Therefore, I chose to use a series of descriptive, exploratory case studies for comparison - four Canadian and one Swedish.

Sometimes the comparison of the case study material is unstructured and not formalised. Rhioux comments, “This particularly occurs when such comparisons occur ex post, and when the collection of the case study material has not been designed to be used for subsequent comparative analysis.” These issues may result in the reliability of the comparison being questioned (Ragin & Becker, 1992; Gerring, 2004).

I deliberately did not develop a theory or hypothesis prior to conducting the case studies as this potentially biases and limits the findings (Eisenhardt, 1996; Strauss and Corbin, 1998). However, I developed research questions which helped focus my efforts and allowed for comparability among the case studies. I identify the research questions in Section 5.2.6.

5.2.4 Selection of Case Sites

Selection of cases is important (Eisenhardt, 1989; Yin, 2003). One option is to look at specified populations. I chose to focus on the Inuit because they indicated: 1) they wished comparative research about economic development from traditional resource development and 2) they lacked voice as Aboriginal people in Canada. In addition, I have a personal interest in Northern Canada. I previously worked for the Department of Indian Affairs in Alberta and the Northwest Territories 9which at that time included Nunavut). My husband grew up in the Northwest Territories and worked many years in northern Canada. My
oldest son worked in Nunavut and was taught by an Inuit to hunt caribou to help feed the family.

Purvis and Grainger (2004) explained that spatial units at each level of a socio-political scale have their own distinctive characteristics and links with spatial units at other levels. These were divided into household, locality, region, state, and supra-national and world scales. Having worked in federal and provincial governments as well as the agricultural and financial industries spanning six Canadian provinces, I felt it was important to capture multiple levels of government. Within the context of this thesis, the historical changes of different socio-political scales and land claim settlements were important for Inuit entrepreneurship and economic development. As the Canadian Inuit live primarily in Nunavut, Northwest Territories, Quebec, and Labrador, the four case examples were drawn from these provinces and territories (taking into consideration the changes in boundaries during Canada’s history). Labrador and Quebec were interesting comparisons as they had less influence from Indian and Northern Affairs Canada. The Yukon Territory in Canada was not included, since Graham (2007) in personal correspondence with me had indicated no Inuit communities were left in the Yukon, although some Inuit individuals lived there.

Therefore, the comparative research sites in Canada included:

- Rankin Inlet and Coral Harbour in Nunavut, the sites of an ongoing Inuit commercial caribou harvest and an Inuit meat processing facility.
- Inukjuak in Nunavik, Northern Quebec, the site of a former Inuit commercial caribou harvest and meat processing facility.
- Happy Valley-Goose Bay and North West River, Labrador, the sites of the current licensee for the Inuit commercial caribou harvest, a meat processing facility, and a discontinued caribou fur felt processing project.

The order of the case studies in the thesis matches the order in which the field visits were made. I started with Nunavut where I had previous research and
business relationships. As was unfamiliar with north-eastern Canada, I went to Labrador first as they spoke more English and went to Nunavik last as they spoke primarily Inuktitut and French. I completed all four Canadian community visits before going to Sweden so the differences between the research sites were even more pronounced.

I used polar types by including continuing and discontinued enterprises/projects (See Table 5.2). According to Cooper (2005, p. 26), “Discontinuance has often been equated with failure.” The Inuit and First Nations peoples asked me not to refer to “unsuccessful” or “failed” enterprises but to use “discontinued” enterprises.

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<th>Table 5.2 Selected Inuit caribou processing enterprises in Canada</th>
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For the international comparison, I focused on the Sámi use of reindeer in Jokkmokk, Northern Sweden. Sweden had more Sámi reindeer and reindeer herders than either Norway or Finland. The area of Jokkmokk in Northern Sweden had a higher concentration of Sámi people (15 per cent of its population). It was a major historical centre of the Swedish Sámi. Five Sámi sameby were located near Jokkmokk. The local Swedish government authorities and other researchers told me Jokkmokk was remote. The Swedish Sámi Reindeer Herders’ Association also suggested the Jokkmokk area.
5.2.5 **Units of Analysis**

I used several units of analysis to explore Indigenous entrepreneurship from caribou and reindeer. In the entrepreneurial process, actors associated with the term “entrepreneur” can refer to individuals, groups, firms, institutions or government bodies (including federal, provincial, territorial, local, Inuit/Sámi) and the entire community.

In the context of Indigenous entrepreneurship, community is an important concept (Hindle & Moroz, 2010; Peredo, et al., 2004; Cooper & Faseruk, 2011; Wuttunee, 2004). Enterprise activities must meet both individual and community needs as well as the needs of multiple stakeholders. Often the community rather than the individual becomes the enterprise. For both the Inuit and Sámi, the use of the caribou and reindeer for entrepreneurship has hereditary and traditional meaning and impacts on the subsistence or traditional economy, the mixed economy and their food security.

Etzioni (1996, p. 5) defined community as follows:

> A community entails a web of affect-laden relations among a group of individuals, relations that often criss-cross one another. A community requires a commitment to a set of shared values, norms, and meaning and a shared history and identity—a shared culture.

Inuit and Sámi communities historically were formed by small groups of extended families. Henshaw (1995, p. 110) commented about the Canadian Inuit: “The social composition of individual domestic units varies. Household clusters consist of fathers, sons, or male siblings. These included the man, woman, their unmarried children, sometimes adopted children and a second wife, as well as widows and their children.” Extended families and kinship formed the basic unit of economic production in Inuit and Sámi society.

The Inuit, Sámi and other circumpolar peoples in high latitudes viewed the reindeer as sentient intelligent beings with shared roles in the ecosystem (Anderson & Nuttal, 2004; Beach & Stammler, 2006; Dwyer & Istomin, 2008; Habeck, 2006). According to Wenzel (1991, pp. 62, 138, and 139), animals and
humans equally form one community as they have equal and jointly shared roles in the ecosystem.

Animals are [...] are *silatujuk* - sentient intelligent beings. They are aware of the thoughts, speech and actions of hunters. This awareness provides animals with information and they may thus choose to participate or not in encounters with humans [...]. Humans are not stewards, dominators or managers but are co-residents sharing the same conceptual ideology (Wenzel, 1991, p. 139).

Also, place names are more than a geographic location. For the Canadian Inuit, they tell the story of the land and its people (Collignon, 2006, p. 199).

The Canadian Inuit and Swedish Sámi communities had local government structures, community organisations, and traditional governing bodies. Therefore, I approached their representatives for permission to do the field research and to request their participation. I also asked for permission from the Elders of the community. I collected secondary data about the community such as census, demographic, and health indicators. In addition, I looked at newspapers, organisation newsletters, government documents and internet sites which reported past and current community activities and the internal and external relationships as they related to the caribou/reindeer.

5.2.6 Research Questions

My research posed the following investigative questions as the principal means for comparing the Inuit in Canada and the Sámi in Jokkmokk’s use of *Rangifer tarandus* for subsistence and commercialisation:

- Why have Inuit remained as hunters while the Sámi became herders?

- Why have the Sámi successfully sold reindeer meat and products in the international market for some time, while the Inuit have not done this with caribou until recently?

- What products and value added processing are done by the Sámi/ Inuit? How do Inuit/ Sámi use and market their products? How do the Inuit/ Sámi experiences compare?
• How have Inuit/ Sámi culture and traditional knowledge affected their enterprises, such as infrastructure, management processes, and approaches to harvesting, processing, and marketing of caribou/reindeer products?

• What obstacles have Inuit/ Sámi people faced with respect to entrepreneurship? How have these been overcome?

• How have Inuit/ Sámi people measured the success of these enterprises?

• How have Inuit/Sámi people innovated, adapted, and used wisdom to be entrepreneurial with respect to caribou/reindeer?

• What can the Inuit/ Sámi learn from each other?

I deliberately did not break these questions down into subcategories to create a more detailed interview guide. Several Aboriginal people in the Northwest Territories in a 2007 research project had told me they did not like this approach and would have preferred to talk more freely. A detailed interview guide would have constrained and limited the data collected. When I conducted the interviews for this thesis, several participants in Canada and Sweden expressed pleasure that they were given lots of time to actually talk and have someone listen to them.

The last question may have seemed unfair as the Inuit and Sámi were not really familiar with each other. However I closed each interview by asking if they had any questions and what they would like others who read my work to know.

5.2.7 Triangulation

Data triangulation was used to add both rigor and depth (Eisenhardt, 1989; Denzin & Lincoln, 1998; Yin, 2003; Mäkela & Turcan, 2007). To confirm the information, I used multiple methods and data sources, observers, and perspectives. I also cycled back to the literature.

Understanding the context of Inuit and Sámi culture, development, and entrepreneurship was important. The field visits allowed for a combination of
observation and interviewing. The semi-structured interview guide ensured that all participants were asked the same questions. I verified responses with other participants and my cultural guide/interpreter to check for misunderstandings. At each site, I used a notebook to track my experiences, observations, and reflections.

To learn more about the culture and lifestyle of the Inuit and Sámi, I visited museums and cultural centres. I also looked at scholarly literature, books, magazines, and websites. While in Jokkmokk, I read scholarly literature at the Jokkmokk Library and at the Ájtte Swedish Mountain and Sámi Museum. I also toured Sámi exhibits at the Ájtte Swedish Mountain and Sámi Museum and the Museum on Skeppsholmen in Stockholm. I also looked for Sámi products made from reindeer in the small stores in Gamla Stan (Old Town), Stockholm and in the markets in Sweden and Finland.

5.2.8 Participatory Observation

Participatory observation helped me to understand the context of entrepreneurship and economic development within the Inuit and Sámi cultures; it also increased my cultural sensitivity (Bruyn, 1966; Lincoln & Guba, 1985; Jørgensen, 1993; Spradley, 1997; Johnstone, 2007).

Healy and Perry (2000) point out that a participant’s perception is not really reality, but rather a ‘window to reality’ through which a picture of reality is triangulated with other perceptions. Bøllingtoft (2007) identified four roles the researcher can adopt: complete participant, participant as observer, observer as participant, and complete observer. As each field site was “foreign” to me, I was a complete outsider. I was in the observer-participant role, i.e., I observed the “subjects” for brief periods and conducted the interviews. My relationship was only research-focused. The persons and their actions which I learned about were also “objects” or “subject-participants.” As they impacted on me, I was learning and being changed. As I was unfamiliar with Inuktitut or Swedish, I frequently depended on others for help. I also made cultural mistakes unknowingly and sometimes my interpreter/cultural guide or a community member corrected me.
Using oral history/verbal protocol was appropriate for interviewing Inuit and Sámi, as both societies traditionally have taught and learned by telling and listening to stories. I found verbal history interviewing useful with the entrepreneurs, Elders, government, and community leaders as they were able to describe their understanding of enterprise development as well as barriers, opportunities, innovations and adaptations (McKenzie, 2007).

Surveys and interviews run the risk of having the respondents reply in ways they think is acceptable to the researchers or presenting themselves and their communities in a positive light (Golembiewski & Muzenrider, 1975; Thomas & Kilmann, 1975; Stone et al., 1979; Johnstone, 2007). Forbes (2008) found that participant observation allows local people’s perceptions to be understood and their questions and observations can be addressed in real time as issues arise. For example, community leaders in two field sites cautioned me not to say or write anything negative about their communities. During my interviews, several Inuit community and business leaders mentioned that they would have thrown a survey in the garbage and not participated if a long and detailed interview guide was used.

5.2.9 Sampling

Purposeful sampling methods were used. Random sampling ignores that some participants may have richer insights and observations, and a better understanding of the behaviour of others. I first targeted the sample before visiting the community by identifying possible participants from the internet: aboriginal, community, government, and telephone directories; business listings; and contacts provided by my professional and academic networks. Whenever possible, I telephoned or emailed the individuals prior to my field visit invited their participation. However when I arrived in the communities, I discovered that many small enterprises were not listed in the telephone or business directories. There were various reasons for this: some enterprises were too small, some owners did not feel a need to register since their community was small and everyone knew them, or some thought the registration process cost too much money.
I started in each community by meeting with and interviewing government officials and community leaders. They were often more experienced and comfortable with outsiders such as researchers. This also helped to establish a trust level for others. They also were familiar with community members who would be good sources of information.

I used snowball sampling (Goodman, 1961) by asking for names of others I should talk with (Müller-Wille & Hukkinen, 1999; Hukkinen et al., 2006; Dana & Dana, 2007). Snowball sampling proved valuable in identifying additional Inuit and Sámi subject matter experts, entrepreneurs, and community leaders. However, snowball sampling may have caused the sample to be less representative (because individuals with more social network links were more likely to be identified), but this limitation was not a major concern given the small size of the communities. Because Canada had recently introduced stronger personal privacy and confidentiality legislation, some government representatives were unable to provide specific names but offered to tell others about my research project.

I allowed community members to self-select into the research project. Announcements on the local radio or in the community newspaper invited individuals who made and traded or sold things from caribou/reindeer to participate in the interviews. I specifically mentioned that the research project was interested in men and women as well as for-profit and not-for-profit organisations.

All individuals identified by these sampling methods were contacted. Some declined to participate. Allowing sufficient time for the community visit was critical as some participants committed then rescheduled. For those who expressed interest but were not available, I followed up by completing a phone interview. One field site required considerable persistence to obtain interviews. I was told they did not feel my research topic was important and they were heavily involved in community responsibilities. However, when I changed my approach from working through the economic development officer to hiring a local community member, the interviews were completed.
All interviews were digitally recorded. I also took digital photographs of the interviewees and their products (if permitted). Each interview was labelled at the start using the “who, when, where” model (Yow, 2005). I usually completely transcribed verbatim the total interviews while in the community (Ezzy, 2002). Thus, the initial transcription was a preliminary form of data analysis as I identified additional questions to clarify and verify information. I assigned an identifying code for each community and individual to preserve anonymity and confidentiality.

Table 5.3 provides summary information about the interviews and samples used in each community. Additional information about the interviewees is provided at the start each case in chapters 6 through 10.

Table 5.3 Description of interviewees for all field sites

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<th>Canada</th>
<th>Sweden</th>
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<tr>
<td>Interviews</td>
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<td>Coral Harbour 18</td>
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<tr>
<td>Men Women</td>
<td>12 2</td>
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<tr>
<td>Elders</td>
<td>2 6</td>
<td>5 0</td>
</tr>
<tr>
<td>Inuit/Sami Other</td>
<td>12 2 16 2</td>
<td>13 0 5</td>
</tr>
<tr>
<td>Government Enterprise Education Other</td>
<td>4 9 1 0</td>
<td>2 15 0 1</td>
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Community saturation occurred when I was exhausted from conducting the interviews, community members were no longer interested in being interviewed or when community members kept asking when I was leaving.

Data saturation occurred when bringing new participants into the research resulted in redundancy of observations and identifying no new insights or themes (Strauss & Corbin, 1990; Morse et al., 2002). Bowen (2008 p. 138)
comments, “Explicit guidelines for determining saturation are almost nonexistent in the literature on qualitative methodologies.” After the interviews were completed, I also sampled events and documents to refine ideas, identify conceptual boundaries, and focus the fit and relevance of categories (Charmaz, 2003).

Theme saturation occurred as I coded the interviews and documents into themes, when the category was fully explained without the addition of new data (Hyde 2008). New themes also emerged after reflection, expanding the literature review, and reviewers provided feedback.

The analysis and coding of the interview transcripts was time consuming and demanded considerable concentration. The reality of seeking saturation in my research was limited by my experience, available time to spend in the communities and reviewing the literature, and finances (conducting northern research in Canada is very expensive).

5.2.10 Issues of Language and Cultural Differences

The first question of language I addressed was what to call my research participants. Were they subjects, objects, participants, informants, interviewees, or respondents? I chose to use “interviewees” as this most closely captured their level of involvement.

I had not previously visited any of the communities involved in the thesis research. Inuktitut is the official language of Nunavut and French is the official language for Quebec. I can read and write French, but am not comfortable carrying on a conversation. I do not know Inuktitut, Swedish, or Sámi. I am a fluent American Sign Language simultaneous interpreter and this was helpful in the interviews with those who did not speak English as I naturally used signs to illustrate concepts.

To show respect for the interviewee’s language and culture, the following documents were translated: permission letter with information about the project and researcher; project description; consent form; letters of support; and interview questions. Languages used were Inuktitut (the official language of Nunavut and
the common language of Nunavik), French (the official language of Quebec), and Swedish. The Administrator at the Sámi Portella said I did not need the documents translated into Sámi.

Finding a local Inuit translator with the appropriate dialect and training was a challenge. Several translators turned down the work after viewing the documents because they did not understand some words and concepts or too much time was required. I finally called the *Northern News* for the name of their translator. She translated the documents necessary for the Nunavut Scientific Research License. In Rankin Inlet, I met a professional Inuktitut translator who later translated the published articles.

Within the Nunavik and Nunavut communities I visited, Inuktitut was the everyday language. Most people were not comfortable in English nor French. In central Labrador, everyone I met spoke English fluently (however I did not go north to Nain). In Jokkmokk, Sweden, most interviewees were more comfortable having a Swedish interpreter present.

I could have hired a local Inuit or Sámi person to collect the data in the communities without my direct involvement. I did not do this for several reasons. First, I assumed that the purpose of the doctoral thesis research was for me to learn and actually apply the methodologies. Second, I felt that hiring others would not provide as rich a meaning or depth of knowledge. Third, I was concerned others might not care about the data quality. Fourth, I would not have increased my understanding of the diversity among Indigenous peoples and their experiences.

Another approach would have been to interview only people who spoke English. I did not do that because I felt that this would miss the point of talking with Indigenous people who, by definition, have their own language. However, I had not realised how many Indigenous peoples are in danger of losing their traditional languages.

Fontana and Frey (2003) suggested that asking questions and getting answers is a much harder task than it may seem at first. I found employing a local person as
the cultural guide/interpreter was very important. The interpreters who were known to the interviewees helped create a more relaxed atmosphere and definitely assisted those uncomfortable with English. They were essential in for on-the-spot clarification and therefore successful communication about the meaning and intent of the questions, such as Inuit or Sámi culture and its impact on their enterprises. Through our discussions, they were critical in increasing my understanding of Inuit and Sámi culture, traditions, and their communities. Without these individuals introducing the research project, setting up the interviews and then interpreting, there would have been far less interviews and the data quality would have been reduced. Using a local person also provided capacity building, the interpreters were often surprised at how much they learned during the interview process (Cuerrier et al., 2012).

Words must be carefully chosen. In describing Sámi culture, Helander-Renvall (2009, p. 92) pointed out that certain rules must be followed as to when and how words are used and referred to. Certain words should be avoided as they are disrespectful, bad or dangerous. Some words or concepts may not exist in a culture. For example in the Inuit Living Dictionary, there was no Inuit word for “entrepreneur” but there were related concepts. A senior Inuit administrator/academic corrected me for using “subsistence economy” and told me to use “sustenance economy”. He also explained why Inuit are not “poor” or living in “poverty”.

Because I was a stranger and not conversant in the local languages, I probably lost the meaning of conversations that would have taken place in more relaxed and informal settings where people would be more likely to talk freely about their feelings and concerns.

For each community, I followed local leaders’ suggestions about translators and interpreters. I used three Inuktitut translators, three Inuktitut interpreters, one French translator, and two Swedish translators and interpreters. Interviewees chose whether the interpreter should be present or not.

Initially I tried using students to transcribe the interviews. They quickly ran into difficulty. Therefore, I ended up transcribing all the research interviews. As I
transcribed, I reflected on how much meaning was lost as the interviewees’ comments in their own language were translated into the much shorter English summaries by the interpreter. Having a second native language speaker listen to the interviews and transcribe these would have increased the quality but they may have chosen different words and connotations. I was unable to do this because of severe budget constraints and lack of Inuktitut and Swedish speaking contacts at the University of Regina.

In cross-language research, there is debate about whether the English used in the quotations as presented by the interpreter should be “tidied up” for English academic publication (Temple, 2005). I did not change any words during the transcription. However following reviewer feedback about the thesis, I minimally reworded some quotations to reflect standard English.

Patton (1990) suggested that it was insufficient for a researcher to depend on recorded interviews without detailed and conscientious note-taking in the field. Writing notes helped me to focus, especially if interviewees did not follow the sequencing of questions. The notes also seemed to make the interviewee feel that I thought what they said was important. I updated the notes with descriptions of my observations daily. This helped me to add new questions and to verify what had been said earlier. I referred back to the notes when transcribing the interviews and during the analysis to locate important quotations and observations.

The Inuit had a high retention of their language. As I presented conference papers related to the thesis research, Indigenous people in New Zealand, Australia, Canada and the United States commented on how unusual this is and often added they wished this was true for their own Indigenous language and culture because these had been lost due to colonisation.

Pictures I took while in the communities proved valuable. Many Inuit did not have cameras and I saw few pictures of family members. Dr. Peredo suggested sending the interviewees’ pictures framed as a gift and memory. Hanging the interviewees’ pictures in my office helped remind that these were real people who had shared their stories and therefore I must finish the thesis. Several people who
attended my conference presentations commented on how the pictures added interest.

I transmitted knowledge among the Inuit and Sámi communities by sharing the pictures in power-point presentations. For example, the Inuit doll makers in Coral Harbour saw the size, faces, and clothing of Inuit dolls from Nunavik and Labrador. I showed the Aiviit HTO in Coral Harbour pictures of the Sámi taming reindeer, separating reindeer by ownership fur marks and ear marks, choosing animals for slaughter, and injecting the animals against warble flies. They also saw pictures of the meat processors facilities owned by the local “butchers” in Labrador and Jokkmokk.

As the articles were published about a community, I sent each interviewee English and translated copies of the article, a digital copy of their interview, and their picture. Returning these materials allowed the interviewees to see how their information was used and provided a tangible reminder of their contribution. Several Inuit told me that this was the first time they had ever seen what was written about them. Copies of the English and Inuktut articles were given to Arctic College in Nunavut for use in their business classes. Arctic College also has asked that materials involving Elders be returned to the communities as a means of capturing their knowledge for intergenerational transfer since so few records exist.

5.2.11 Data Analysis and Interpretation

The “culminating activities of qualitative inquiry are analysis, interpretation, and presentation of findings […] The challenge is to make sense of massive amounts of data, reduce the volume of information, identify significant patterns, and construct a framework for communicating what the data reveal” (Patton, 1990, p. 371).

While in the communities, I developed a loose evolving framework of themes and concepts (Patton, 1990; Miles & Huberman, 1994). Other themes became more readily apparent as I transcribed the interviews, reviewed my community notes, and looked at documents. I also added comments and reflections to the interviews
and notes. I then did a detailed analysis of the initial interviews (Strauss & Corbin, 1998; Dana & Dana, 2005). I read the transcribed interviews and field notes several times, wrote margin notes and reflected. I also marked certain information with coloured highlighters (Wolcott, 1994). As the themes and concepts emerged, I asked questions, and looked for similarities and differences. I broke the themes into sub-themes and displayed my findings by creating tables, concept maps, and figures.

I did not use NVIVO or another software tool for analyzing the qualitative data. To preserve the Inuit and Sámi context and voice, I created tables and copied phrases and sentences into these from the Microsoft Word documents of the transcribed interviews. I also developed themes and sub-themes based on the data in some cases and the concepts in the literature. I then searched the interviews with the key words of the themes to find occurrences. Similar to Ford and Beaumier (2011) and Cresswell (2007), I did not count and report frequencies.

The process of data collection, data analysis and writing were interrelated and often went on simultaneously (Cresswell, 2007). Each descriptive case was written initially directly after the community visit and interview transcription. This helped to focus the learning and develop comparisons for the data collection in the next community. Through cross-case theme analysis as illustrated in Figure 5.2, I gradually built understanding, interpretations, and generalisations. As Dey (1993, p. 6) suggested, I “learned by doing” the qualitative research. Finally, I linked the generalisations back to the literature (Wolcott, 1994).
Cross-cultural research requires an understanding of the culture, history, language, customs, expectations, and aspirations of the population of interest (Marshall and Batten, 2004). As I started to learn about Indigenous entrepreneurship, it became necessary to better understand the difference in world views between Indigenous and non-Indigenous peoples. See the previous discussion in Section 5.2.1 about differences between western scientific and Indigenous knowledge.

Information and instruction was transmitted orally in many Indigenous cultures through myths and stories (partly because they lacked written languages). According to Cajete (1994, p. 33), “the spoken or sung word expressed the spirit and breath of life of the speaker and was thus considered sacred.” Dorais (1990, p. 201) indicated the Eastern Canadian Inuit had an extensive oral literature consisting of unikkaatuuq (long stories about events in the recent or not too distant past) and unikkausiq (legends, myths, or stories about the distant past). Stories were usually told in the winter time.

A specific gift or honorarium is given to an Elder to have a particular kind of knowledge shared. For example, after giving tobacco to the Elders at First Nations University, they provided suggestions for conducting the research (similar to Struthers, 2001). I was taught that only certain stories can be told by certain people, within certain contexts, at certain times, and to certain people. Men and women may be given different information and taught different skills.

Older or more experienced people may also be given different information. Certain individuals may be chosen for a particular path therefore they would receive more information; or an Elder may be ready to pass on and feel the need to share the knowledge with a follower. Before going to each community, I asked about the appropriate gifting to the Elders.

Modelling of behaviour is an important way many Aboriginal people formulate and transmit wisdom (Swan, 1998, p. 49). People must learn to do simple things
before they can develop the ability to learn more complicated skills. According to
the Government of Nunavut Human Resources Department website (2005):

Inuit as a people have a long-standing code of behaviour based on time-
honored values and practices. These values were communicated to
younger Inuit at a very early age through stories, songs, direct modeling
of behaviour and legends that spoke of the success associated with
remembering them.

Figure 5.2 Data analysis in the multiple case study*

*Adapted from John W. Creswell (2007, p. 172). *Qualitative inquiry and
research design 2nd edition.* Thousand Oaks, California: Sage Publications,
Some Inuit and Sámi interviewees mentioned the importance of learning by doing and listening. As I was writing my notes during an interview, I was asked if that was how they taught me in the south.

5.2.13 **Traditional Inuit Knowledge (Inuit Qaujimatatuqangit)**

The Inuit have stressed the importance of their culture by conducting community consultations to document Inuit Qaujimatatuqangit (IQ) or Traditional Inuit Knowledge. IQ is more than traditional knowledge or wisdom; it is about process (Arnakak, 2001). According to the First Annual Report of the Inuit Qaujimajatuqanginnut Task Force (2002, p. 7),

> It is more properly defined as, ‘The Inuit way of doing things: the past, present and future knowledge, experience and values of Inuit Society.’ This definition makes clear that it is the combining of the traditional knowledge, experience and values of Inuit society, along with the present Inuit knowledge, experience and values that prepare the way for future knowledge, experience and values.

In Inuit culture, valued personal characteristics are self-reliance and the ability to meet life’s challenges with innovation, resourcefulness and perseverance as well as patience and the ability to accept reality (Pauktuutit, 2006a, p. 32). In their *Inuit Women in Business* training program, Pauktuutit Inuit Women of Canada described these values and their importance when starting and operating a small business (Pauktuutit, 2006b).

Lewthwaite, McMillan, Renaud, Hainnu, & MacDonald, (2010, p. 7) added, “IQ is really about healthy sustainable communities regaining their rights to a say in the governance of their lives using processes, principles and values they regard as integral to who and what they are.” They explained when discussing educational processes, the principles of *Pilimmaksarniq and Pilirigatigingniq* “endorse the need for development through practice and action ensuring the community is a full and meaningful partner in educational development activities [in which I would include partners in research projects]. Working together for common cause
ensuring equal power relationships becomes imperative to any successful project.”

Therefore, my research design included actions such as seeking permissions and research licenses, asking people which community members they thought should be interviewed, obtaining signed consent, providing honorariums and employment, asking how values impact entrepreneurship, and translating back into Inuktitut the case studies which were developed, and sharing the knowledge gained with the communities.

Bell (2003) discussed the relevance of Elders’ knowledge in economic development for Nunavut. A constant theme is the survival of the Inuit people in the past and into the future. The relationship with the land remains very important. Thus Elders would support initiatives that would:

[… ] protect the land, increase Inuit use and knowledge of the land, and foster awareness of the land as the source of Inuit culture. This includes hunter and trapper assistance programs, on the land survival skills programs, inter community trade in land foods, food processing, sport hunting and fishing, commercial fishing, mining and resource development directly benefiting the Nunavummiut, production and sale of traditional clothing, cultural awareness programs and employment for elders, environmental protection, management and education and geo-science projects” (Bell, 2003, p. 11) [underlining is mine to draw emphasis].

5.2.14 Aboriginal Research Relations

While researching in the Northwest Territories in 2006, several Northern people told me this joke: “What is the definition of an Inuit family? It’s a father, mother, three children, a grandmother, and a researcher.” I was also told Inuit sometimes refer to researchers as “siksiks” (ground squirrels) because they scurry around during the summer collecting their data, but no one is too sure what they are really doing. I was frequently asked during my research visits to explain what my research was about and why it was important. Past Indigenous research experiences have been discouraging (Gearheard & Shirley, 2007) therefore, some Inuit people were distrustful and suspicious.
Research about Indigenous people can be negatively associated with European colonialism and oppression (Smith, 1999). Dr. Linda Tuh'iwa Smith, a Maori researcher commented, “Research is probably one of the dirtiest words in the Indigenous world’s vocabulary. When mentioned in Indigenous contexts, it stirs up silence, it conjures up bad memories, it raises a smile that is knowing and distrustful” (Smith, 1999, p. 1). She added that imperialism and colonialism regulate research through the formal rules of individual scholarly disciplines and scientific paradigms, and the institutions that support them (Smith, 1999, p. 8).

Durst (2004) noted several issues in doing Aboriginal research resulted from differences between the academic and Aboriginal cultures. The researcher as an “expert” may be seen as lacking humility, promoting oneself above others, rude, and offensive. Critiquing and criticizing are not allowed in Aboriginal cultures; therefore, the researcher might be seen as impolite and disrespectful. If this occurs with Elders, the research would be seen as even more disrespectful. Digging deeper through questioning and probing may be seen as rude and impolite, particularly when dealing with Elders and Aboriginal leaders. Disseminating research findings in public forums of papers, reports, and presentations may be seen as promoting one’s work without humility; it also raises the question of the ownership of the knowledge.

Other researchers also discuss research challenges in the Canadian Arctic (Gearheard & Shirley, 2007; Moquin, 2007; Caine, et al., 2009). Aboriginal complaints about past research usually focused on the research methods and the lack of benefits received by the host Aboriginal community (Champagne 1998, p. 18). The Elders at First Nations University said it was very important to identify the benefits which the host community and the Aboriginal people would receive from participating. Therefore, I spent time discussing with the northern communities what they considered to be benefits derived from participating in research projects. It was important to employ local people, provide honorariums, train their young people in research, and share back what was learned so they could learn as well. When seeking permission to visit the communities, I carefully described the potential benefits. During the research process, I tried to ensure that promises were fulfilled and on-going benefits
delivered. I found this somewhat challenging because of the distance, costs, shortage of time, and telephone/computer/internet problems.

The Inuit indicated that it is often difficult to consult all the appropriate parties, build trust relationships and make decisions as research time frames are often too tight. Furthermore, “all consultation processes must recognise the significance of culture for the Inuit organisations” (NTI, 2002, p. 13). Therefore, I initiated community contact to obtain permission several months in advance of the planned field trips and the timing was mutually arrived at. For the field visits, I allowed one to two weeks in each of the Canadian communities and three weeks in Sweden to fit with the “rhythm” of the community.

Durst (2006) suggested that I work through the university networks such as our membership in the University of the Arctic, use a cultural guide for the community, involve the community in designing how the actual information would be gathered, and include elders and youth in the interviews. I followed most of his suggestions but did not do interviews with youth under 18 years of age as they would require more involved Research Ethics Approval.

5.2.15 Guidelines for Aboriginal Research

In Canada, extensive legislative regulations and guidelines affect how research is conducted when Indigenous people are the subjects. In developing my methodology, I gathered information from the Social Sciences and Humanities Research Council’s of Canada’s Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans 1998, with 2000, 2002 and 2005 amendments, in particular section 5 (Women) and section 6 (Aboriginal people); the Association of Canadian Universities for Northern Studies (2003); the Nunavut Research Institute & Inuit Tapirisat (1998); the Inuit Tapiriit Kanatami (2007); the Indigenous Peoples Health Research Centre (2004); Brascoupe & Mann (2001); Ermine (2004); and Hampton (2006). The guidelines are summarized in Appendix 14.7.

Several Inuit governing bodies also had research protocols and required licenses for any research undertaken within their settlement areas (Aurora Research
Institute, 2008; the Nunavut Research Institute & Inuit Tapirisat of Canada, 1998). I incorporated these guidelines in the research design and execution. I was mindful of the need to build long term relationships and to respect the unique Indigenous, Inuit, Sámi, and northern community concerns.

NTI suggested “Inuit consultation (about the economy) should take place through community hall-type meetings, radio announcements, Elders groups, schools, local councils and local chambers of commerce” (NTI, 2002, p. 13). Therefore, invitations to participate in the research were extended over the radio and in the local newspapers. I also participated in radio talk shows.

5.3 **Applied Research Methods**

5.3.1 **Research Ethics Approval**

My research ethics approval (see Appendix 14.1) was received initially from the University of Canterbury in New Zealand. I also required approval from the University of Regina because: 1) I am a full-time member of the Faculty of Business Administration, 2) research involving Aboriginal peoples is strictly regulated in Canada, and 3) the Canadian Council for Small Business and Entrepreneurship would not provide a letter of support until this was done (see letters in the Appendix). Copies of the research ethics approval from both universities were required by the Nunavut Research Institute and also by the municipality of Jokkmokk and the Sámi.

5.3.2 **Elder Consultation**

Communities identify specific Elders as culture bearers. Owlijoot and Nunavut Arctic College (2008, p. 4) state, “...the identification of ‘elders’ as culture bearers is not simply a matter of chronological age, but a function of the respect accorded to individuals in each community who exemplify the values and lifestyles of the local culture. Respected elders are role models in each community who serve as advisors, philosophers and professors.”

I consulted with Elders throughout the research process. For example, while attending the Aboriginal Women’s Entrepreneurship Conference in January 2006,
I asked First Nations Women Elders and a representative from the Pauktuutit Inuit Women of Canada for suggestions about doing research on Inuit entrepreneurship from caribou. They suggested I gain entry to the communities through the University of Regina’s connections with First Nations University, the Nunavut Arctic College, and the University of the Arctic.

I met with Elders Velma Goodfeather, Isadore Pelletier, and Ken Goodwill at First Nations University in August 2006 to discuss my topic, community entry, and cultural protocols for the research. I also spoke with Richard Missens, Director of Public and Business Administration at First Nations University of Canada. They suggested using existing university networks and since this was a Business and Management thesis, to use the networks provided by Aboriginal Business Canada, the Council for the Advancement of Native Development Officers (CANDO) and the local Economic Development Officers. They mentioned having Elders and people I knew in Regina assist with the invitations and speak on my behalf.

The First Nations Elders discussed values like community reliance versus self-reliance; sharing; wise stewardship of resources; hard work; persistence; showing respect for all; respecting Elders; respecting practical experience from life; treating others equally; being in harmony; and not criticising. Traditions and culture sensitivity related to the research topic were also addressed. Although uncertain about how their “Inuit cousins” viewed caribou, an Elder explained how the heart and skull of the buffalo had ceremonial purposes and should not be sold. A male Elder explained that I would be told only what women could hear; later I found this to be true. Research teams for Indigenous projects would benefit by including both women and men.

The First Nations Elders asked what the benefits of the research were going to be and advised me to clearly describe these. They asked how I intended to share the knowledge back to the communities and in what forms. They explained that I must ensure the knowledge was available to people in an understandable way as many people still spoke only their Aboriginal language and older Aboriginal people are often unable to read. After our meetings, the Elders discussed the
research at an Elders Conference in La Ronge, Saskatchewan in August, 2006. One Elder referred me to a young Aboriginal woman from Labrador whose husband, an Innu, was a cultural guide for researchers. He suggested working through the economic development officers and reading articles written about the community. He strongly recommended the use of a local cultural guide as an assistant. I followed these suggestions during the data collection phase.

The Elders from First Nations University later discussed my research at the Elders Council for the Province and with the Elders in Nunavut.

5.3.3 **Research Licenses**

To conduct research in Nunavut, The Nunavunni Qaujisaqtulirijikkut/Nunavut Research Institute (NRI) must issue a special Nunavut Scientist’s Research License under the Nunavut Scientists Act. This process took a minimum of 45 days and was involved. I had to demonstrate prior consultation and agreement of the local communities. I also had to provide a 500-word project description and copies of the consent forms, letters of support, and research ethics approval. All documents were required to be in both Inuktitut and English. Research could not start in a community until this license was received. I was issued NRI 2007 Research License No. 0301207 N-A (see Appendix 2). Later, NRI requested copies of related publications and conference presentations as well as a research report.

Research licenses were not required by the provincial governments in Quebec and Labrador. According to the Nunavik Land Claim Agreement and Labrador Inuit Land Claim Agreement, a research license should be obtained. However I did check and was not required to do this. The Labrador Inuit said a process was not yet in place. The Swedish authorities said that no research license was required because the field work in Jokkmokk would take less than three months. The Municipality of Jokkmokk also said I did not need a research license and asked for copies of future publications resulting from the research.

Although the research licenses required more work and resulted in time delays, they provided value for the Indigenous people. First, these reflected the right to
self-government and the gaining of independent decision making. Second, the research license ensured the following: the community was aware of the research and its purpose; the methods were culturally appropriate; the people understood what would be done and they could choose not to participate or stop at any time; the community and participants received benefit; the research work did not interfere with local sustenance and commercial activities; and the community received the results. Third, the license also protected Inuit people from unscrupulous researchers who would steal their knowledge or take samples of their plants, animals, or minerals and exploit these for commercial purposes.

A conference participant asked if I saw the extensive protection of Inuit rights as “paternalistic.” I responded, “No” and added that these regulations demonstrated respect for their Indigenous autonomy and recognised that they were capable of making their own informed decision to participate.

Letters of support were needed for the research licenses (refer to Appendix 14.3). I also provided these when asking community permission for the field research and when inviting participation from individuals and organisations. Honourable Charlie Watt, Inuit Senator of Canada from Nunavik in the Province of Québec, asked all Inuit in Nunaat (Inuit Canada) to open the doors to their homes for the research. The Canadian Council for Small Business and Entrepreneurship (CCSBE) said that the research ethics approval from the University of Canterbury was insufficient for doing research in Canada and they would issue a letter of support after I obtained approval from a Canadian university.

5.3.4 Gaining Entry

To inform governments, researchers, and communities, I listed the thesis topic with the research listings of the Arctic Council, the BQMB Caribou Board, RangiferNet, the University of the Arctic and the Circumpolar Indigenous People’s Research Group.

Following the University of Canterbury Research Ethics and Agreement with the Maori people, each host community was informed that I needed the consent of the most senior elder in the community prior to beginning the research and I
also needed a formal invitation prior to my arrival (Durie, 1998). In all communities except Rankin Inlet, I was told that obtaining the consent of the most senior elder was not necessary. All communities confirmed in writing their willingness to participate in the research and their invitation for my field visit.

Representatives of the local hunters and trappers association, the Inuit and Nunavut governments, and the community government were phoned and emailed to ask for their participation in the research. The personal phone call was important as the internet and fax connections often did not work.

In the Sámi culture, it was important to gain entry through a respected Sámi person (Müller-Wille and Hukkinen, 1999; Hukkinen et al., 2006). For the Swedish research, I worked through the Canada Department of Foreign Affairs and International Trade, the Canadian Embassy in Sweden, the Sámi Council, and the Swedish Sámi Reindeer Herders Association (SSRHA). The SSRHA provided information about Sámi and sameby, proposed possible research sites, and then suggested Jokkmokk as a remote location. Permissions for the field research were obtained from the Jokkmokk municipal government’s Mayor and Director of Economic Development. I also networked into the Sámi community through Swedish researchers I met at conferences.

5.3.5 Conducting the Data Collection

Reflecting on the research, it was very beneficial to go to the communities and collect the data myself. However, this was very expensive and I personally paid for many costs not covered by the research funds. I experienced the challenges of operating in different languages and cultures. As most of the English I heard was with my interpreter/cultural guide, I experienced some culture shock. Differences in language may have been considered a limitation, but overall the interviews went quite well. In the future, I would likely partner with an experienced researcher known to the Sámi, since this would result in even richer interviews and data. Many parts of northern Canada were comparable to operating in a foreign under-developed country with the risks associated with health and safety.
I also learned the importance of studying entrepreneurship in context. “Remote” in Canada was vastly different than “remote” in Sweden. In Canada, the communities were much more distant from large, urban industrial and political centres (Huskey & Morehouse, 1992). They also had less developed communication linkages and infrastructure. Government legislation, policies and programs were very different. The Sámi and Inuit situations were quite different but also shared some similarities.

I learned that research methods need to be flexible and adapt to fit the field situation. For example, some Swedish people thought honoraria should not be paid; however, several entrepreneurs were delighted to receive them.

To summarise, in Chapter 5 I have addressed the design and application of the research methodology. Section 1 discussed the literature searches and some of the challenges I incurred. Section 2 addressed research design choices including my position regarding western scientific and Indigenous knowledge approaches; the use of qualitative research and the case method; selection of case sites; units of analysis; and the research questions. The data was collected at five sites through semi-structured interviews and participatory observation. Purposeful sampling was deliberately used to seek out interviewees. Triangulation and a variety of information sources were used to expand on and ensure the accuracy of the data collected. As interviews were conducted in Swedish, Inuktitut or English, I reflected on how the differences in language and culture were addressed. I then discussed how the data was analyzed and interpreted. I also addressed aboriginal epistemology, Inuit Qaujimatuqtuqangit (IQ) or traditional knowledge, Aboriginal research relations, and guidelines for conducting Aboriginal research. In Section 3, I detailed the applied research methods such as research ethics approval, elder consultation, research licenses, permissions and letters of support; and gaining entry.
6 Rankin Inlet (Qangiqliniq), Nunavut

This is the first of five chapters which report the exploratory descriptive cases for each of the specific research sites. The following aspects of Rankin Inlet are described: community context, the Inuit sustenance economy, Inuit livelihood enterprises, the Inuit formal economy, Inuit commercial caribou harvest/processing, barriers to Inuit enterprise, Inuit cultural resiliency and change, and learning from others. Throughout the following pages, numerous quotes from Rankin residents are included to give the reader a deeper understanding of Inuit entrepreneurship and the impact of Inuit culture on entrepreneurship.

Table 6.1 Description of Rankin Inlet interviewees

<table>
<thead>
<tr>
<th>RA: Non-Inuit, male, CEO, Inuit Financial Investment Company</th>
<th>Elder RB: Inuit, male, master carver, Hunter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elder RC: Inuit, female, master seamstress</td>
<td>RD: Inuit, male, post-secondary administrator and former CEO</td>
</tr>
<tr>
<td>RE: Inuit, male, Inuit government manager</td>
<td>RF: Inuit, male, manager commercial harvest</td>
</tr>
<tr>
<td>RG: Inuit, male, Nunavut government manager</td>
<td>RH: Inuit, manager, Inuit development corporation</td>
</tr>
<tr>
<td>RE: Non-Inuit, male, entrepreneur, manager</td>
<td>Elder RJ: Inuit, male, elected statesman</td>
</tr>
<tr>
<td>RK: Inuit, male, Nunavut government</td>
<td>RL: Inuit, male, CEO of Inuit development corporation, entrepreneur</td>
</tr>
<tr>
<td>RM: non-Inuit, female elected president of NGO, entrepreneur</td>
<td>RN: Inuit, male, entrepreneur</td>
</tr>
</tbody>
</table>

6.1 Community Context

Rankin Inlet or Qangiqliniq, the second largest community in Nunavut, is located on the western edge of Hudson’s Bay about 1500 kilometers north of Winnipeg, Manitoba or 2250 kilometers from Montreal, Quebec. Rankin’s climate is harsh, with short, cool summers and long, cold winters. Strong winds are common. The inlet freezes completely by November and does not break up again until July. Snow cover lasts from late September to early June. No roads connect Rankin to other communities, but in winter people can drive across the bay and down the coast to Chesterfield Inlet (but not to Coral Harbour).
The population of Rankin Inlet is over 2200 with about 80% Inuit. Two commercial airlines offer daily flights connecting from Montreal, Quebec, and Winnipeg, Manitoba. Inuit moved to the community initially to get jobs in the Rankin Inlet mine, which operated for several years in the 1950s. Rankin Inlet is therefore different from the other 25 communities in Nunavut as it was built on a wage economy.

Rankin Inlet also serves as a regional centre for the government of the Northwest Territories (NWT). Many people moved there to work for the government and for Inuit organisations. Since Nunavut was formed, Rankin Inlet has expanded because the infrastructure moved from Iqaluit and Yellowknife and some levels of government devolved. RD added, “This took care of the administrative needs of all the people as well as put jobs in place.”

RD: Rankin has this unique status [for] the people that are here. They are of a nature and mind pursuing the economic dream. They are being adventurous from the Inuit culture and actually doing something. They have moved off the land to live in Rankin Inlet and to enter into a wage economy.

RJ commented that Rankin Inlet is more cosmopolitan and less dominated by one tribe or clan when compared to other Nunavut communities.

RJ: If you go to other communities […] they will tell you in no uncertain terms this is the town of this culture. They will say the tribe.

RD added, “If you went to Chesterfield or Whale Cove, the community has generations from that area.” Strangers are also more welcome in Rankin Inlet. RJ explained, “We have tried to respect people who work regionally here. We have made it public […]. One has to welcome strangers who come here.”

Family remain very important. RD mentioned, “That is kept alive in these young people […]. They know their aunts, their friends […]. Each family has a unique identity here.” Many offices and businesses close during the lunch hour so people can eat with their extended families.

Businesses and some families order their fuel, equipment, goods and non-perishables (including food) from southern Canada for the entire year through
“sea lift”. The order is delivered by ship once per year during July and August when the harbour is ice-free. Supplies are stored in crates, boxes, pods, containers, and tractor-trailers near the dock in a secured yard. Tankers bring aviation and heating fuel and gasoline; then transfer it by pipes to huge storage tanks. This is the only source of fuel for the community as there are no hydroelectric dams or wind turbine farms. Goods not ordered through sea lift are flown in at huge expense.

All the buildings are several feet above the ground to prevent the permafrost from thawing. Utilidors (insulated above-ground and underground pipes) provide fresh water and plumbing for many buildings and houses. Diesel storage tanks are located outside the buildings. RD commented, “Only 3 of the 25 communities in Nunavut have core piping. Here in Rankin Inlet, you can turn on the tap and water comes out and you can leave it running for hours. Everyone else is on trucked water and sewer. If you went to another community, not everyone can take a shower or run water when they want it.”

Since receiving payments from the Land Claim Settlement, most of the Inuit try to own homes. This may provide savings later to draw on for capital investment in new businesses. Government subsidised housing is common.

RA: Inuit get CAN$45,000 from the land claims and also very low interest loans [for a home]. It costs about CAN$200,000 for a new house. About a third of the Inuit community are traditionalists so they do not work. They hunt. They live in public housing. The people pay CAN$600 per month rent plus utilities; the government pays CAN$2600 per month toward their rent.

Although Inuit people live in town, going out on the land and to their cabins is very important. According to RA, a person could put up a cabin anywhere and tell the Nunavut Tunngavik Inc. where it is. He added, “Nunavut means ‘Our Land’. All of the land belongs to all of the people. They have a sense of stewardship for the land. All have the right to hunt.” Using all-terrain vehicles, RA took me out on the land to several cabins, fishing lakes, and hunting grounds.
6.2 Inuit Traditional or Sustenance Economy

Traditionally the caribou provided clothing, food, shelter, tools, bedding and transportation. Caribou were essential to family survival during the long cold winter. During the summer months and in the early fall, they were not so critical. Other Inuit, lacking sufficient caribou, traded for it with seal skins.

*RJ:* When it came to the very severe winter, the caribou protected the whole family. Before having enough snow to build a shelter, you lived in a caribou tent [...] Bones were used for tools, for spears, and for making kayaks. We did not have enough wood to build certain things. [We used] all the bones - anything that was long enough to support the kayak frame, tent frame, even sleds [...].

According to RJ, one or two hundred years ago Inuit beliefs restricted eating certain land or sea animals (or parts of them) during certain seasons. “Today, Inuit are a lot less suspicious of certain spiritual stuff. We are probably a lot more entrepreneurial today.”

Elders RB and RC are the oldest Inuit in Rankin Inlet. Elder RB explained the importance of caribou and the yearly cycle of the caribou hunt.

*Elder RB:* I was born in 1921. When I was old enough to hunt, I used to follow other people because I couldn’t do it on my own yet and my father had gone. As I became older, I learned the land and that’s when I started hunting for myself.

In July and August, we used to do our fishing and dry most of the fish. We used to bury the leftovers to feed the dogs later on. After we caught caribou, we used to bury them under rocks. This was during the summer time. We used to hunt caribou in August to mid-September for clothing and food when the furs and meat were better. We only used to go hunting by walking or dog team; we had no ski doo or Honda (ATV).

In the fall when it was just freezing, we tried to catch as much caribou as we could. In the winter time, it was too cold to hunt. So we tried to get a fair amount of caribou to feed everybody during the time they couldn’t hunt. In October and November, the women started making warm clothing so we could use them while hunting for foxes [...]. In December, we were not really hunting because we had to get ready for Christmas. In January, we would take out the food that we had buried

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2 I was asked by a senior Inuk academic who had previously been a business and government executive to use “sustenance” rather than “subsistence” economy.
Caribou hunting is very expensive today. The Nunavut Government and the
Nunavut Tunngavik Inc. (NTI) have programs that support the caribou harvest
indirectly to ensure food security and recognise the cultural, social and wellness
importance of the caribou. The Hunters Support Program—which NTI
coordinates—ensures that every community receives money to purchase motors,
boats, ATVs, snowmobiles, and sewing machines. These are distributed to local
hunters. It still costs Inuit CAN$40 or CAN$50 for gas every hunting trip. For
people without access to money, they can feel overwhelmed, depressed and even
suicidal (RE).

**Hunting versus Herding**

Inuit traditionally hunted caribou. Unlike the Sámi, they do not have farms or feed
for the caribou. The caribou migrate great distances and the calving grounds
change from year to year. Reasons for hunting include climate, geography, and
cultural values and beliefs. The harsh climate and short growing season (almost
one half that of Scandinavia) combined with the rocky grounds result in less
vegetation. Therefore, caribou would graze out an area quickly and it would take
20 or 30 years to recover.

*RJ:* Here you have a lot less vegetation to sustain a large herd in one
season so our herds tend to migrate quite a distance. You would have to
move thousands and thousands of miles within your borders.

*RE:* Herding caribou would graze out an area especially with the
numbers […]. Traditionally Inuit were nomadic people who traveled
where the wildlife went. The environment is not conducive to building
fences and containing animals […]. When an area was grazed out, it
would probably take 20 or 30 year cycles in areas [to restore it].

The caribou herd that migrates up and down the coast through Rankin Inlet
contains about a half million animals. An Inuk (the singular form of Inuit)
commented, “They are hard to miss when hunting.”

Inuit believe that wildlife should not be controlled. According to RH, “Wildlife
does not belong to you. This fundamental belief was incorporated into the Inuit
Land Claims Settlement.” Inuit view the caribou as a sentient being with thought. According to Elder RB, “The wildlife had asked them not to do that [herd or ranch]. They would ask if they could adopt the caribou or such animal to raise them but it was wild.”

RD: Nobody has ever done [ranching] in these parts. I don’t know why. [Perhaps] there was no interest […]. Add money, there is ownership, possession and greed […]. There is a high regard of caribou and the provision it provides to families as a sustenance food for the harvesters to take in. [It’s] far more valuable than making a couple bucks off of it. Then in a decade or two you have no caribou.

The caribou has become more vulnerable since snowmobiles, airplanes, and satellite tracking have enabled increased access.

RG: Before when caribou might migrate out of the area or be more vulnerable smaller population, it would be left alone. With today’s advancement, now they go to the wildlife office, ask about the satellite data and where the herd is. Then, they charter planes or go by snowmobile. They do a community hunt. They can find and reach the caribou. If you take 1000 animals out of a 200 to 300 thousand size herd, it is not a big thing. Today if you take 200 out and the herd is down below 100,000, it is a lot more vulnerable.

Recently caribou herds have declined across the Northwest Territories and Nunavut. Elders say the warmer weather is causing the snow or ice cover to melt and then refreeze. The caribou are unable to reach the vegetation and starve. Hunters were travelling long distances on land and ice to find caribou.

RE: Now there are very few caribou. This is a big concern in Pond Inlet, Arctic Bay, Iqaluit, and other communities. In Pond Inlet, hunters were travelling 70-80 miles to get caribou. They were even crossing 10 miles of ice. That was unheard of before.

RD: Our caribou are much more on the hoof. They move great distances. This year we were fortunate. All the caribou dropped their antlers within the proximity around Rankin. That indicates they are going to be around for the whole winter. […]. The year before that you could go out for three weekends in a row and could not find a caribou.

The number of caribou has dropped so sharply in the Baffin Region that the Peary caribou has been declared an endangered species. In the NWT, caribou was banned for commercial sale in 2007 which meant restaurants and stores could not sell caribou products.
Harvesting Households

The Inuit hunt and work together as harvesting households to which men and women contribute. Elder RB hunts walrus, polar bears, narwhale, beluga whale, and caribou. Elder RC uses their furs, skins and sinews to make clothes for her family and customers. She also dries the fish and meat. Young men are always expected to bring in the harvest. Some siblings are told to go to school or to work. Their income contributes toward the costs of the harvest and to purchase necessary goods and services. A clan family’s harvest would be equal to CAN$150,000 to $200,000 a year.

*RD*: You have a central house like your parents. There is a clan of brothers and sisters and the people married into that. A little bit of a social network tends to revolve around the harvesting household. The father in the typical house structure is the leader of the house of that clan […]. Certain people will be active harvesters. They will never get an education and they will never get a job. Their purpose in life is to harvest and to bring in the food. There are siblings who are told you will never hunt. You can not go on this hunt. You have to go to school. You have to go to work […]. You will find there are more ladies working than some of the younger men because the latter are always held in a position where they need to go out and bring in the harvest.

A harvesting household would bring in about 100 caribou, 20 to 30 seals, a couple walrus, and a dozen wolves and other animals. Our family also does 15 to 20 whales per year in the summer. If you look at the household in terms of raw numbers, how well they eat and how much they have all depend on this activity. You would need an income of CAN$150,000 to $200,000 a year to be on par […]. I would not want to be the person who upsets that balance.

Women have always contributed by preparing the food, making the dried meat, preparing the skins, sewing, and making clothes. RD explained for his mother, “That is how she grew up and that is her purpose in life. She needs to be passing on that knowledge.” Today, everyone contributes. Wage earners supply the gas and ammunition for the harvest.

In reflecting on the social impact, RD noted that the harvesting sons who did not have jobs were held in higher esteem within the family and the community than those earning a wage income. This influences how they behave, such as staying away from alcohol and drugs, keeping active and staying fit. Other youth would
drop out of school earlier, eat poorly, or end up in jail or the corrections system because of peer pressure.

Inuit are concerned that traditional skills are not being transferred sufficiently to the younger generation. Because they are unable to fulfill community expectations of being good providers of food, some young men are becoming depressed and suicidal.

RE: The suicide rate among young men is very high because they are expected to be hunters but lack the skills. For the younger generation, it is harder up here. When it is cold and 40 below who wants to go out there […] In the more remote community, it is that much tougher […]. Being a hunter you just do not go out because you are born, you have to be taught and grow up […]. We have a young generation that do not have those [hunting] skills; yet there is that expectation still there. That is really tough.

Food Sharing, Greed and Selling of Caribou

Inuit still practice food sharing of caribou in their communities and with kin located in other communities. RL said, “Inuit always have been inclusive and you have shared […]. Everyone in the community has a share. The day you deny sharing a piece to someone you will be ostracised. People will not look at you much.”

RE: Even today [selling caribou] is contrary to the culture. Not many of our people supply food. I went out hunting this spring and the snow was good […]. My wife said just take enough for a three month supply. I ended up catching more than I need because the supply was there. They were not going to be around within a month […]. I cut them all up neatly so they are attractive. I went on the radio to say help yourself. Greed is not part of my culture. If I were in that other family they would say caribou for sale. If you wanted to try and sell it outside the community, you would have to go through all the regulations and register yourself as a company. If you were persistent enough with greed you could make out here in the local community.

An Inuk added, “Success is the satisfaction that you have not taken more than your share […]. I do not mind sharing […]. For hundreds of years, I can see and hear the cries of people hungry for fresh meat in my mind. Why should you sell caribou? I cannot do that.”
RE explained further about food sharing, greed and changing cultural practices.

RE: When you do not [food share], you are seen as being greedy. If you sell it, there is another stigma there. In Rankin, in larger communities, and even in smaller communities to a certain extent, you see it more on the local radio. It is all in Inuktitut. They have fish or they have made dried meat, if you want a bag it is CAN$20. The stigma is sort of fading away […]. People have different opinions as to whether this is good or bad.

Inuit do not limit food sharing to their own family and community. With the reduced numbers of caribou on Baffin Island, people from other communities have been sending their relatives and friends whole caribou. This illustrates the importance of kinship ties in ensuring food security.

RE: While at meetings in Iqaluit, we were all bringing whole caribou. My wife packed a couple boxes. My coworker went on the radio [asking for caribou]. Just our little group brought over three or four caribou. These were then sent to communities in Baffin Island. Other people were doing the same thing […] family connections [and] friendships. […] People were phoning Coral Harbour to make arrangements. Freight rates are horrendous. People are paying close to CAN$10 per kilo for freight to Baffin Island.

Commercialisation

The Inuit have a strong cultural belief about environmental stewardship. They were concerned about commerce from caribou. Elders had experienced starvation when caribou disappeared in the 1950s. Elder RC showed me a picture in a book of Inuit children starving when the caribou migration had changed. She commented, “Look at the hungry baby, small.”

Caribou is available to all Inuit, whether they are rich or poor. But RD noted, “When it crosses over to the commercial side, it is no longer accessible to the poor. […] Only the rich and those who have the means to survive well enough if they were not involved in harvesting caribou are the ones who stand to benefit.”

RK: There are a lot of people quite capable of harvesting and shooting caribou. If you put a commercial bounty on it, the caribou are gone […]. We have seen that with the fish. We had a 15,000 pound quota for our [community …]. In two decades that stock was all gone, we fished everything out.
If the caribou were over harvested, the Arctic and sub-Arctic food web would collapse. Note, that it is not seen as a food chain or pyramid.

RD: Commercialisation of caribou, in the form of herding, would represent the beginning of the end of North American wild caribou populations and the eventual collapse of sub-arctic and Arctic food chains […]. The caribou is highly regarded and is a keystone asset for the sustenance and essentials it provides […]. It is much more valuable than fish […]. Caribou is not around all the time […]. If there are other options to pursue for commerce or a commercial interest, I do not think caribou are high on the list. It is probably the last thing you would want to do in our culture.

The commercial caribou harvest in Coral Harbour was acceptable because this herd did not migrate off the island and other communities did not depend on it for food and essentials.

6.3 Livelihood Enterprises

The Nunavut government classified arts and crafts, enterprise hunting, and clothing production as “livelihood business.” RE explained:

RE: Within the land claims, Inuit have the right to trade and barter to do all these things […] without a commercial license. We are at bit of a crossroads with the government’s approach. The government cannot put that control on the individual fishermen [or hunter] but can put control on the business. So the government puts the control on the fish plant or meat plant so it can only purchase [the input] from a commercial body. So the government is regulating from a different angle so it is not just wide open.

The Inuit had traded with explorers, whalers, and then the Hudson’s Bay Trading Post. Until the 1950s, the trading posts used wooden tally sticks for the trade and entered this amount into the account ledger books which the Inuit would then initial (RD). The Inuit primarily traded hides, skins and clothing from fox, caribou and seal skins. Sometimes they traded with wolves and wolverines but did not receive much. The Inuit shopped for basic supplies but did not receive much in exchange.
Elder RB: When we had first traded or sold our skins and clothing at the trading post, the Inuit received wooden sticks in exchange. 1 We used these for money to buy things. [...] The [trading post] used to buy caribou skins and seal skins but they were so cheap. We used to hunt foxes but did not get as much for it. Today we do not get much for foxes and we cannot buy much from it now as everything is very expensive. With the furs, we used to buy coffee, tea, flour, biscuits, bullets, guns, gas, and smokes for my parents and gifts for others. We had no fresh foods only canned goods.

Elder RC told about her first experiences observing women trading and receiving money for working.

Elder RC: When I was living in Coral Harbour, I did not know anything about money […] When I went to Chesterfield Inlet, I started noticing women selling their sewing or fox furs. They used wood sticks for money. When I first was a teenager […], I started working at keeping house. They paid me with coins. I thought they were nothing so I threw them away.

Elder RC began selling clothing products she made from caribou and seal in about 1953-54 when her boys were small because the family wanted things.

RC: I started thinking about how I can get recognised because of my sewing. What can I do for people to know what I can make? This was always in my mind […]. I started making amauti with beads. I would sell them but it was not going as well as I wanted. So I thought about it again. I started making dolls after seeing them on television. I started thinking I can do better than that if I try. We took pictures of them and people bought the dolls […]. The Baker Lake people show their wall hangings […]. I wanted to be like them. But I could never find a way. I finally found my answer to be recognised by showing myself with dolls through the Inuit Broadcasting Company.

Elder RC started making traditional Inuit dolls with beaded details on the amauti to gain recognition and differentiate her product. Now, her dolls are in museum collections in several countries. Elder RC was also noted for her detailed beadwork on ceremonial parkas. She showed me her sewing room and several products. Elder RC’s dolls for the Kivalliq Doll Show had finely made clothing

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1 I researched the Hudson Bay Archives to explore this further. Ballantyne (1848, p. 38) described how the Hudson’s Bay Company used “castors”, “wooden cash” or “little bits of wood” when trading with the Indians and Inuit to avoid the need for circulating money which was either not present or in very short supply in the communities. Goods traded in exchange for meat, skins and fish included iron, gasoline, rifles, ammunition, candy, other food products, some clothing. When the Inuit needed aid, the traders would provide food and other items on account.
and boots from seal and caribou. The seams were beautifully hand stitched. She firmly said I could see but not touch (in case my hands soiled the items). Recently, Elder RC began writing her name on a card to put with the dolls. She planned on telling her story on the Inuit Broadcasting Corporation.

After receiving a grant from the Canada Council, RC made a large map of Rankin Inlet from caribou skin with extensive beading. Elder RC also tried to become a sewing instructor and have a sewing group but she had no money to try a contract. With assistance from the Kivalliq Inuit Association to fill out the forms, she was approved for a contract as an instructor to set up her own sewing group and teach others. She had been an instructor for about three years.

Elder RB showed me a variety of large harpoons, fishing gear, fish hooks and harpoon hooks as well as traditional ulus (crescent shaped knives) that he had made from bone and wood. He made and sold smaller replicas to tourists as souvenirs. A display cabinet with products for sale was located in the front entry of his home.

Inuit culture and traditional knowledge have affected the enterprises which made products from caribou. According to RJ, “Being an independent hunter is survival. You do not wait around for permissions. You do not wait around for the opportunity. You look at the season, month, and year. Take it. If you miss it, it will not come back tomorrow. That is the spirit of the enterprise hunter. You use the same concept with the business.”

RD described the spin-offs and reciprocity attached to the sale of caribou items which his wife made.

RD: For the caribou, it is such a huge part of our culture and diet. The spin offs [are] the arts and crafts, the skins and the furs that help clothe the people […]. There is reciprocation in terms of money back and value added. My wife […] is more hard core in the old culture than I am by far […]. She has been sewing her own clothing since she was about 10 or 12 and her own parkas since she was 14 […]. Nothing is store bought. She makes her stuff out of leather and different materials. When she makes her parkas and sells them, she typically gets CAN$1000. Some of them are worth CAN$1500 now. The extra money comes back [and] buys the next tank of gas so the hunters can go out and bring in the animals.
Several Inuit young men approached me on the street selling carvings, jewellery, prints and artwork. Caribou products were available for sale in Ivalu, Kissarvik Co-operative, Matchbox Gallery, Siniktarvik Hotel, Sugar Rush Café and the airport. The Nunavut Development Corporation also had a website featuring many Inuit products for sale including carvings made from caribou antlers and bones.

6.4 **The Formal Economy**

The Canada-Nunavut Business Centre listed more than 90 registered businesses in Rankin Inlet. When I cross-referenced these with the Inuit Business Directory, Inuit people owned more than 60 of these businesses.

I visited several businesses in the formal sector. The Northern Store (the former Hudson’s Bay Store) sold appliances, clothing, food, house wares, outdoor products and carving supplies. It provided services including catalogue ordering, cheque cashing, money transfers, and fast food. The Kissarvik Co-operative Association Ltd. was Inuit owned and included a hotel and a grocery/retail store. It also sold carvings and artwork purchased from Inuit living in Rankin Inlet. The Inuit carvings the local co-op purchased were sold to Arctic Co-operatives Limited which then sold these internationally.

A subsidiary of the Nunavut Development Corporation, Ivalu was a retail outlet which purchased and sold arts, crafts, carvings, clothing, accessories, ulus, house wares, decorations, and dolls made by local Inuit. Both the Canadian Imperial Bank of Commerce and the Royal Bank provided branch financial and lending services. The Manuq Inn and the Siniktarvik Hotel provided accommodation and restaurant services and the latter also sold local Inuit artwork. Kivalliq Arctic Foods was the only meat and fish processor.

Most businesses were solo entrepreneurs. Inuit owned a bed and breakfast, several outfitting and eco-tourism operations, and a repair shop for automobiles and snowmobiles. Trades people operating their own businesses were in short supply. For example, a refrigeration specialist was flown in from Winnipeg or Montreal to repair the cold storage unit at KAF and this had caused significant
delays. Nunavut had never offered trades programs so people would have to go south to Ottawa or Montreal to receive training. This was expensive and also required long separation from their family support systems.

Recently, several Inuit families had pooled their money and to create Piruqsaijit, an Inuit financial company. It owned most of the real estate in Rankin Inlet and rented this out for government offices. Piruqsaijit also owned buildings and property in Iqaluit and Baker Lake (the site of the new gold mine). I also met with representatives of the Nunavut Wildlife Services, Nunavut Economic Development and the Nunavut Tunngavik Inc. (formerly the Tunngavik Federation of Nunavut).

RL owned a hotel which offered adventure and eco-tourism packages. He explained how traditional Inuit knowledge and culture were applied used in eco-tourism today and how this was sustainable economics. The Inuit are changing and innovating.

RL: As Inuit people, we hunt and we kill. Now we use our same skills tracking, viewing, and taking people out onto the land to view wildlife […]. We used to have our clients go out and shoot the caribou, polar bear, and musk ox […]. They paid CAN$2500. The animal is dead, gone. […] With eco-tourism, the same animal can have 25 people all clicking away with the camera and each paying CAN$2500. Then another 25 people with their cameras can take shots of the same animal for the same price. Economically we learned eco-tourism is a viable business – it is sustainable. We have learned by using all the Inuit skills of tracking and hunting but now have a camera. That is the kind of innovation our people have been going through. I talked with an older guy he said: “One shot he is dead; one guy happy. With a camera, 25 people are happy and the polar bear is happy too.

6.5 Inuit Commercial Caribou Harvesting/Processing

Rankin Inlet had no licenses issued to commercially harvest caribou. However, Kivalliq Arctic Foods (KAF)—which started in 1992—was the licensed Inuit firm which processed caribou and arctic char for commercial sale. Initially known as Keewatin Meat and Fish and operating out of an old fish plant, it sold only within the NWT. Its caribou meat supply came from local Inuit hunters in Rankin Inlet.
RE: Before they used to go out, get seven or eight caribou and take three or four to the meat plant to get a few hundred dollars. As soon as the plant became federally inspected, KAF had to stop buying from local hunters. They were very upset. Suddenly they had nowhere to sell their caribou meat. This created some tension in the community.

Ownership and Funding of KAF

KAF was 100 per cent owned by the Nunavut Development Corporation. This was a crown corporation of the Nunavut territorial government. KAF had a wholesale and retail store as well as internet ordering through its website. Between five and twelve Inuit were employed in the processing facility.

The federal government under the Special Agriculture Rural Diversification Assistance Program provided funding for the development of the commercial caribou harvest. This program provided the initial funding to get KAF setup – about CAN$80,000 or CAN$100,000 for 3 years. RE commented, “NTI [Nunavut Tunngavik Inc.] and Nunavut Development Corporation worked together so there was no cost […].When that started, the big push was to get inter settlement trade. The federal policies were more around agriculture and agri-food.”

Because the caribou meat was packaged, processed, and sold within the NWT, Canadian food inspection was not required. According to RG, “At that time, it did not matter whether the animal had taken a gut or shoulder shot or if the animal was several hours or a day old. If the meat appeared good, it was purchased. The standards were very different then. This was a very limited market.”

KAF Products

KAF cut, boned, and processed the meat. This was then vacuum-sealed, quick-frozen, labeled, and boxed. Products included prime caribou cuts such as strip loin, tenderloin, french rack, and denver hind targeted primarily at high-end restaurants. The company also processed ready-to-eat, shelf-stable meat. It also sold custom products for the Nunavut market such as pukik (a bone marrow delicacy), mikku and another local product in which fat was rolled around the caribou stomach. Mikku was a traditional Inuit food consisting of very thin slices
of dried caribou meat without salt or preservatives. The smoked caribou ribs which had become very popular in Nunavut had less labour costs as KAF did not have to remove the bones. The General Manager had tried making and selling smoked pork ribs but the Inuit had not liked the taste. I sampled salami slices and jerky.

RI mentioned KAF sold antlers from younger animals to a southern buyer who wanted them cut into little chunks and boxed before shipping. The antler was made into a powder for addition to soups and medicines.

Although KAF had done a lot of product development, it had not broadened its product line further. This would have added costs for packaging and changing the processes.

RH: We have made everything from big bum bologna, koubasa [a mild garlic sausage], pastrami, to black forest ham. Anything else you can imagine made in a type of European sausage. We have the recipes. But to do it, you need almost another separation of the plant and the product. The product we have is working for the sales that we have.

Caribou competed in the market with other exotic meats, such as buffalo, deer, and emu. RI explained that caribou meat was sold to high-end chefs through a network of twenty distributors. A higher price was commanded as it was not going to the retail trade. RI said, “It’s a tough business. It is a select market, and you have a select clientele. It can also be very volatile.”

RI: We have such a small quantity. I would guess the distributors are putting it out at CAN$62 to CAN$65 per kilo for the tenderloin or for the short rack […] You see that at Banff and Whistler at CAN$100 to CAN$120 per plate for their product. Say you harvest 3500 caribou that is about 7000 short loin pieces. It does not take long when distributing to the high end market. The distributors use it to complement their product line and have it available.

KAF could increase its return by 15 to 18 per cent if it sold directly to the restaurants. However, RI commented that this could be lost in collections and they never have an account over 30 days; most are 15 days.
Quality Standards and Food Safety

The KAF facility burned down in the late 1990s. When contemplating rebuilding and retrofitting, the new plant would need an increased market to be profitable. RI commented, “Given the facility’s small size, the design and layout were very important to optimise operating flexibility.” RH added, “Opportunity can come from misfortune […] The NDC which owns and runs the plant recognised an opportunity. If we are going to rebuild, let us do it right and look at federal certification.” The Canada Food Inspection Agency (CFIA) must certify any caribou that is going to be sold outside the territory to other Canadian provinces, the United States, or Europe.

The new facility was built with a more efficient layout, new stainless steel equipment, large ovens, and freezers (see Figure 6.1 showing the outside of the new KAF facility). KAF had designed the facility for maximum efficiency and flexibility and to incorporate hazard analysis and critical control points (HACCP) standards for quality assurance.

Achieving federal and international quality assurance and food safety standards were critical to build and maintain global markets KAF received federal certification for its meat processing facility in 1995 and EU certification in 2001. Both RH and RI commented that as very few plants were EU certified before a few years ago, this opened up new opportunities in the EU.

When I toured the KAF facility, I noticed the offices of the CFIA Inspectors, the very detailed records with the quality assurance measurements, the electronic monitoring instruments for product integrity, and the strict attention to hygiene and safety standards. Like the employees, I wore a white lab coat, hair net, and cloth boots to prevent contamination.

KAF began purchasing all the harvest from the Southampton Island commercial caribou harvest using Inuit with traditional skills from Coral Harbour. The product was flown in a contracted Hercules aircraft from Southampton Island to Rankin Inlet. An empty back haul was used to cut the airfreight costs.
RI: Up to that point the community was selling almost all of the meat to a processor in Ontario. All the eggs [were] in one basket and pretty much all were going outside the territory for value added processing. So a variety of factors came in: people keeping the value added processing here, maintaining traditional skills, including the priority of looking at herd population control for the island.

Federal inspection was done under the authority of the Canadian Meat Inspection Act and Regulations. These regulations contained strict facility construction and sanitation standards to ensure the safety of the meat and meat products, and each animal carcass was inspected.

To continually upgrade the processes and product to meet increasingly tightened product and packaging standards, KAF, Aiviit HTO, and the Coral Harbour Development Corporation had to work closely with the CFIA. The Coral Harbour harvest using the portable abattoir also received EU certification. RF and RG commented that both companies had developed detailed operations manuals to document the processes for the commercial harvest and the meat processing facility.

Figure 6.1 Dr. Ana Maria Peredo and I outside Kivalliq Arctic Foods Ltd. in Rankin Inlet, Nunavut (photo by Jim Mason)
According to RH, the CFIA initially conducted on-site inspections of KAF’s plant facilities in Rankin Inlet every three weeks. RG noted the CFIA inspectors stayed on-site at the Southampton Island camp and portable abattoir during the six week harvest. For KAF to receive export permits to the United States and internationally, a veterinary inspector had to remain on-site at the Rankin Inlet plant, inspect products and processes and sign certification documents. RE indicated KAF had described some difficulties in achieving the EU certification as the new guidelines really had not been developed in Canada.

When the outbreak of BSE first occurred in Canadian cattle in 2003-2004, KAF’s caribou products were blocked at the border as the U.S. ban covered all ruminants, not just beef. KAF’s caribou products later became exempt from the ban because the animals were wild and ate no prepared feed. RE added, “We were concerned about the long term viability of the project if the meat could not be sold internationally. We were told in talking with [the general manager] and those in government internationally, caribou was not on the hit list as it is disease free.”

The CFIA was much stricter for the 2003 and subsequent commercial harvests on Southampton Island (RE, RG, RH, and RI). Starting in 2003, one veterinarian and two CFIA inspectors remained on-site at all times for the harvest. RF explained that the company on Southampton Island had brought in a Quality Control Consultant from Alberta in 2003 to act as the harvest manager. The consultant who had worked previously with the CFIA assisted with developing new harvest processes and standards.

KAF made other product and process improvements. Jerky making was sped up four to five times by applying the solution with hoses. Significant attention was paid to maintaining the CFIA and EU certification. KAF constantly monitored and adapted to regulatory policy changes of the EU, the U.S. Food and Drug Administration, and the CFIA. For example, RI indicated they might require different types of bacterial sampling or more frequent sampling. Also, KAF indicated that management of technology, internet selling, computerisation, and electronic monitoring systems to ensure product integrity all came at a cost.
Branding and Packaging

Branding and packaging were very important. The company changed its name to Kivalliq Arctic Foods to more closely identify with the Arctic and also to be market rather than product driven. The redesigned image had Inuit symbols and pictures. Visual identification of the Tundra Brand was developed and linked with caribou, musk ox, and arctic char products. KAF marketed all caribou products under the brand name Tundra Brand Caribou. By focusing on the “unique and wild” and “truly wild” KAF differentiated its product lines from competitors. Its marketing featured the product’s naturalness and emphasised Inuit performing the traditional caribou hunt. KAF’s website featured statements like “wild caribou, wilderness, natural habitat, natural, no hormones, and no chemicals.”

RI elaborated on the importance of the branding and visual identification for communicating with the distributors and getting the market:

*RI*: Communicating to the distributors and identifying to them what products we have […] such as branding with the logo; putting the logo and seal on the package. Every package that goes out of here is identified with Kivalliq Arctic Foods. None of it is non-branded. Everything has the yellow label.

He added that customers commented on seeing the yellow label on the product when they were looking for caribou and then following up with the order. KAF no longer needed to attend trade shows because the product was largely presold.

International Exports

KAF participated in trade missions to Europe and the United States. An Inuit employee wore traditional Inuit clothing at the KAF trade show booth. KAF was featured in Canada’s Aboriginal Business Directory and listed on Canada’s Virtual Aboriginal Trade Show which was sponsored by Canada’s Aboriginal International Business Development.

When exporting internationally, KAF prices were set in US$ therefore currency fluctuations had an impact on the bottom line. The recent rise in the Canadian dollar as well as increasing fuel costs has reduced profit margins:
RH: There is a premium on everything in Nunavut. Heat, electricity, everything that moves is fuel driven. That hurts us dollar price wise. International customers typically want the price [...] It does not matter whether the deal is in the United States or Denmark. We essentially try to negotiate a price that is hopefully reasonable to both parties and have to stick to it.

KAF had refocused a lot of product into the Canadian market from the US for the last several years. This reduced costs associated with paperwork, export documents, and tariffs as well as saving time.

RI further elaborated on the development of the local Nunavut market to reduce freight costs:

RI: Any of our secondary meat processing like smoked rib, mikku, jerky; we call “Country Food and we are putting right into the Nunavut market. It will take pretty well everything we can process. That reduces our freight costs as it is FOB Rankin. [The seller pays the shipping and loading costs from Rankin Inlet to the buyer’s location.] Our primary stores that buy it are the Northern Stores - they are very good supporters of Country Food.

Robert Connelly, Manager of Economic Development with the Nunavut Government, indicated the commercial caribou harvest had a high impact on both Rankin Inlet and Coral Harbour, particularly with regard to its employment and infrastructure (see Meis Mason et al., 2006).

Not all Inuit felt positive about KAF’s focus on the international market. It was still difficult to buy caribou in communities and it was too expensive locally and not affordable. A recent study of inter-settlement trade in Nunavut (which the Baffin Region Chamber of Commerce had participated in) recommended that KAF should do more inter-settlement trade and sell more caribou products in Nunavut.

RE: When we were part of the NWT, we could distribute throughout the NWT. Because KAF is focused on Europe, it is specialised. If the harvest goes, the meat plant has no product [...]. Why are we not diversifying? Why are we not retrofitting an old freezer or creating a physical building. Communities want to be able to do something locally.
Financial Considerations

KAF used several measures of success. The first measure was jobs created and maintained.

RH: The first is job creation, the number of people we can hire and the number we keep employed […]. The consistency of employees is also important. For example, three or four employees now go back almost to the beginning of this company […]. Here in Nunavut that is a totally different reality as job turnover is very high.

Retention of key staff and their development over the years were big challenges. KAF did all training in house. Staff had gone to sausage seminars long ago but it was very expensive to travel. RI added, “The bottom line affects every decision and everything we do. A lot of stuff here is controlled by airplanes.” RH added “KAF started doing the training before there was Kivalliq Partners in Development.”

Other measures of success were profitability, sales, sales growth, gross margin, and reduction of NDC subsidy levels.

RH: The NDC wants to see companies wean off subsidy and be profitable. It wants to divest of companies and move them off to the private or other sector to whoever might be interested […]. Really the success of the business is totally dependent on the management and the consistency there of, year after year. The lessons learned in business aren’t learned over night.

NDC’s President commented that its subsidiaries and funded enterprises needed to develop utilizing the resources and skills in the local area and create jobs in the smaller communities:

NDC President: It is not about direct dollars and cents. […]. It is the sewing skills of the Inuit people; the natural resources of the Inuit people, like caribou, the fish. Those are what have to look at […]. We are trying to create jobs [in the smaller centres] […]. There are employment opportunities in these larger communities. It is the government providing income support programs for people to live and not having to buy southern based foods.

RI indicated that other financial considerations involved controlling high power costs, particularly the need to control cooking and cold storage costs. KAF’s power costs were CAN$8,000 to CAN$9,000 per month and could easily go over
CAN$10,000 to CAN$12,000 per month in the summer. RI indicated that this was big money for a small plant. Utilities savings came by turning off whatever the company could, reducing consumption by using more insulated ovens and freezers to retain temperatures, and even substituting fluorescent and 30 watt bulbs for 100 watt bulbs.

Table 6.2 shows the annual financial statements of KAF which were compiled from the Nunavut Development Corporation’s annual reports from 2001 to 2007.

Table 6.2 Kivalliq Arctic Foods Ltd. Financial Statements 2007 – 2001

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<td>350</td>
<td>362</td>
</tr>
<tr>
<td>Net Profit “After subsidy”</td>
<td>260</td>
<td>368</td>
<td>(13)</td>
<td>165</td>
<td>118</td>
<td>6.6</td>
<td>(3)</td>
</tr>
<tr>
<td>NCD Capital Contributions</td>
<td>149.5</td>
<td>11.8</td>
<td>20</td>
<td>105</td>
<td>100.9</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Jobs</td>
<td>18</td>
<td>24.8</td>
<td>23.8</td>
<td>24.6</td>
<td>32.9</td>
<td>19.1</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Nunavut Development Corporation Annual Reports 2001-2007

Over this period, KAF more than doubled its sales while decreasing the amount of NDC subsidy contribution by 31%. Although the breakdown is not shown, in 2003 KAF processed 260,000 pounds of caribou and 3,800 pounds of char. KAF helped the partnership with Aiviit HTO at Coral Harbour, and often negotiated with the CFIA on their behalf. KAF also assisted with ordering supplies for some of Aiviit HTO’s annual sea lift order. They helped with bridge financing to assist with buying ammunition and new steel combo storage units. Some Aiviit staff were flown to Rankin Inlet and trained to use bookkeeping and accounting...
software applications. By seeing what happened at KAF, they also gained a better appreciation for how the Southampton Island caribou hunt linked into KAF’s processes and products.

6.6 Obstacles to Inuit Enterprise

The list of obstacles to the development of Inuit enterprise in Nunavut was long. It included (1) Inuit cultural characteristics (practices such as food sharing, not selling caribou, and “living for today”); (2) lack of education (including lack of business knowledge and skills); (3) lack of infrastructure; (4) remoteness and poor connection to markets; (5) limited access to financial resources, and (6) the high cost of transportation, energy, and materials. These obstacles are described in the following paragraphs.

Inuit Cultural Characteristics

Inuit culture can be viewed as both a barrier and an advantage. Inuit believed, for example, that caribou were not property and should be allowed to roam free, and that food sharing was important. Belief in food sharing, however, reduced the Inuit’s willingness to sell caribou commercially. On the other hand, Inuit also realised the need to control the caribou population and to have more jobs. Therefore, they were more supportive of commercial caribou harvest and processing if it was done in the appropriate locations.

Inuit cultural practices also affected how the caribou were commercially harvested. The CFIA rules initially required that the animals be corralled before killing. The Inuit insisted that this was not culturally appropriate and the rules were changed to allow the caribou to be in the wild and free roaming when they were shot.

The Inuit culture was a collective society with kinship and clan structures being important. People still practiced barter, trade, and gift exchange in the informal economy. These could make the development of Inuit enterprise challenging.

RE: People who come back to Nunavut and start their own business have found that everyone expects they will get a deal or for free; especially if they are relatives or friends. Everyone is a niece or cousin. They have to
learn to approach the business very professionally. Keep good track of the books. Run it like a business. As Rankin Inlet is a large community, it is a lot easier than in a smaller community where it is really hard to do.

As frequently occurs in smaller communities, tension can occur between families. An Inuk commented, “One has to be careful of where one treads and what one says; one doesn’t want to burn any bridges.” That is why important Inuit cultural values include harmony and balance.

With the high retention of Inuktitut as the primary language, many Inuit were not comfortable in English. In the past, most of the federal and territorial government officials were non-Inuit from southern Canada. Dealing in English to understand polices, programs, rules and regulations as well as filling out forms was very difficult. With the NCLA, this started to change as Inuktitut became the official language and Nunavut government employees were required to be sufficiently fluent in Inuktitut.

**Lack of Formal Education**

Nunavut lacked access to a qualified workforce as the market was so constrained in its supply and demand. RM commented, “The price of the workforce goes up and the small business owner is bidding against the government of Nunavut, the aboriginal organisations and the larger businesses. Smaller businesses have to recognise they may pay a lot or pay a lower amount and get less skilled employees. As soon as employees get skilled, they want to move on and get better paying job.” People who would become entrepreneurs were joining the government as civil servants because the jobs now focused on Inuit hiring. Before, they would have been excluded from those positions. The Inuit organisations also had more employment than previously. Nunavut’s labour shortage included financial accountants, bookkeepers, controllers and skilled people. To catch up, the government was investing in people training. Arctic College had expanded the Rankin Inlet campus and added trade, technical and other skills training. As well, the College actively used prior learning assessment and recognition to acknowledge skills and experience that Inuit had developed previously.
Many people who entered business did not have previous training or business experience. According to the RM, “They basically have a good idea, and say I’ll try this. They learn as they go. If they are successful that is good. If they are not successful, that can be expensive.” Arctic College had recently developed a small business management program. The Baffin Regional Chamber of Commerce which was started in the 1970s also encouraged “anybody who holds and business license and pays their workers’ compensation” to apply for membership. It offered training, programs and networking for members. As well the Chamber had a special membership category for non-business interests like government, boards and agencies. Each of the mayors was granted membership because they represent their communities.

**Lack of Infrastructure**

Infrastructure development was needed for business and economic development. Nunavut was working on getting a highway to connect through Manitoba in southern Canada. According to RL, “There is a drive within our people to have access to the rest of Canada to bring the cost of living down. [This will allow for] influx of technology, capable people with new ideas, new concepts, tourism, access to new markets, and broader market place for our products. Yes some children will leave but they are going to bring some skills back.”

The Baffin Regional Chamber of Commerce pointed out on the map the location of the Nunavut-to-Manitoba Road and explained how they were encouraging the governments of Canada, Nunavut and Manitoba to develop it. Many spinoffs would occur by being able to bring goods and services into the Kivalliq Region and elsewhere at significantly lower costs.

*RM*: If the goods can get into Rankin Inlet, it is only one hour air travel to Iqaluit as opposed to two and one-half hours from Ottawa to Iqaluit. This would half the air cargo costs. Airfreight rates go up every time the fuel costs go up or something happens in their industry, so the small business person is continually pushing the margins on your products. Costs of bringing in goods and services are quite high. And resupply is also an issue. A retail operation has to balance off the cost bringing it on the sealift versus the cost of shrinkage and storing over the remaining 11 months of the year.
Although Chamber members would like to see tourism development, the very high costs precluded the average tourist from coming. It cost CAN$2500 to get from Winnipeg to Rankin and CAN$250 a day to stay in a hotel while a trip to Australia costs less.

The shortage of housing, the cost of private housing, and the rules preventing home-based businesses also presented obstacles to enterprise development. People living in public housing were not allowed to start a business but needed another location. “A lot of Inuit people live in public housing. We have encouraged our government to clearly define what is permissible and what is not. Very slow process.” RJ added, “[Zoning] regulations don’t allow a number of businesses to occur at home […]. If you go to a Scandinavian country, it is very different they encourage home business. Here the minute you go producing something you don’t have a commercial license, this is a private zone.”

*RJ*: If you own house, you can start a business. If you don’t have employment just the capacity to pay the power, fuel, municipal services takes $1500 per month. Have to generate a high level of return to offset the costs of having a facility to operate out of. Furthermore, for people in Nunavut the concept of saving is unknown or new. Most people down in the south would save up their equity and use this to get going as injection into the company. For many people in Nunavut, an initial equity injection is often hard to come up with.

According to RM, the regulatory structure was also very complex. RJ commented, “Have to go through rigmarole of regulations and permits. A lot of government hindrances: local, regional, and territorial.” RM explained someone who goes into business suddenly becomes responsible for collecting and filing Goods and Services Taxes, Employer Withholding Taxes for Employment Insurance, Canada Pension Plan, and Workers’ Compensation. Businesses like tourism or outfitting business had to satisfy territorial regulatory bodies. RM added, “One business had 23 separate agencies wanting to be involved in environmental control of some nature. For someone who is just starting up and doesn’t have English as a first language that can be almost insurmountable barrier.”
To provide improved services for business, the Canada Revenue Agency now had an office in Nunavut which offered tax services in English, French, and Inuktitut. Before this, a person had to talk with a department in Ottawa for help with resolving their issues. The Nunavut government had also decentralised services to the local communities.

Each Nunavut region had a development corporation which was given an annual allocation of development dollars to invest in infrastructure. In Nunavut, RJ indicated, “Partnerships are often necessary. However, these may be your enemies here, dealing with greed and mistrust.” RL explained public/private joint ventures are used to generate revenue for the communities. The Inuit owned 50 per cent of the Canadian North Airline and the Inuit from Nunavik owned 80 per cent of First Air. Both transportation modes would be in the North forever. RL indicated the development corporations invested in those things that would service and grow with Inuit people. They became involved in enterprises like services to mining companies undertaking development on Inuit land. Those mining companies also were tenants and paid fees. Impact and benefits agreements were negotiated if they found something. The Inuit wanted first opportunity for their young people to be employed.

RL: Having a consistent team of environment and business people at the negotiating table is important so the same message keeps coming to the table. People see there is an intent and purpose, know what want to do with own land here to improve the lot of the Inuit beneficiary.

According to the RM, the Chamber President, “The aboriginal organisations started by the land claims groups have the equity […]. They don’t have the start up issues a small business has because they are financed and supported by the aboriginals. But they generally start off as medium sized enterprises […]. To grow, […they] acquire another business and they become an aboriginal business.”

Inuit owned businesses could get grants from Kivalliq Partners in Development (KPID), the economic arm of the Kivalliq Inuit Association whose parent was the Nunavut Tunngavik Inc. The organisation provided grants for employment and training programs. Livelihood enterprises such as carving and harvesting could also obtain grants.
The Nunavut Government and Nunavut Tunngavik Inc. (NTI) also developed a preferential procurement policy for Inuit owned and northern based businesses. The policy assisted aboriginal and northern business in accessing government contracts and government agency contracts. The Inuit Firm Registry Database had 140 registered Inuit firms listed in 1997, 292 in 2006, and 295 in 2011. Kivalliq region had 59 registered Inuit firms in 2006 and 70 in 2011.

The Baffin Regional Chamber of Commerce maintained the Nunavut Business Directory and no fees were charged for registering a business.

*RM:* This was initially done to assist the construction industry where we wanted local construction companies to build public housing and to do major public housing renovations contracts therefore creating benefits from the employment and capacity for trades training. Previously the large corporations like Poole Construction and other large companies with big contracts on a global basis had preference. They are far more skilled and they have the economies of scale that would allow them to take the contracts. Before division of territories, it was called the business incentive policy in the GNWT. Now since Nunavut was created it is the NNI policy.

**Remoteness and Poor Connection to Markets**

Isolation from markets was another big obstacle. RL added, “Transportation is mostly by air and is very expensive. Even if the product you produce becomes economically viable, it is not competitive for sure with the products available to the southern market. That is where the big market is. Most of the territorial people living here harvest their own food, country food particularly if they so choose.”

The small, geographically isolated market in Rankin Inlet resulted in a lack of competition, higher prices and less selection. For example, small communities had only one taxi business and it was still a struggle to survive. RM, the Chamber President, commented, “Rankin Inlet is supposed to have four taxis but when four are running there are insufficient people to pay. If we have four licenses, two fail and slowly exit, two remain active taxis; see this cycle every three or four years.”

Lack of competition also increased the prices; however the local communities have too small a local market and insufficient resources (RL, RJ).
**RJ:** A lot of people shop to economise their spending and control their budget. [In Nunavut], we don’t know anything about what is the cheapest supplier. We don’t know anything about how to bargain for sale. […]. We don’t know what is an average price or good deal. All we know is expensive; we never see anything cheap.

**Limited Access to Financial Resources**

Inuit had very little savings for use as equity to get an enterprise going. RL, President of NDC, described the challenges in accessing financial capital for enterprises in Nunavut:

**RL:** The biggest obstacle in any venture in the Nunavut and the Northwest Territories is access to capital - loans, grants or contribution funds, grants to develop and operate an enterprise of any sort. Most of that is developmental - accessing capital for businesses that will not generate a profit for a period of time. Not much of that around […]. You can’t go to the bank. For example, with the commercial viability of caribou, unless there is a true proven process or a true business plan with a hefty profit, the bank won’t talk to you.

Except for Iqaluit, Rankin Inlet, and Cambridge Bay, there were no banks or financial agencies. RM commented, “Just managing a business without having a bank in your community can be quite a challenge for a small business person.” RL explained that Inuit used the compensation from the land claim settlement to create an Inuit Investment Fund for economic development. The Inuit Investment Fund had recently purchased equity in a federally chartered Aboriginal bank.

**RL:** Not enough banking services are located in the north. When you don’t have a say in the bank they will gouge and take whatever they can and leave. The Inuit Investment Fund has recently bought a major equity in a federally chartered Aboriginal bank. The Aboriginal bank will provide services to our community. Any generated profits are recycled into the community or other communities with access to that bank as investments […]. If you own the bank, the shareholders are your citizenship and you are not going too far. You may have to modify some operational entities so it is profitable so it can generate its revenue, its recycling fund and revolving fund. Those are the kinds of things we have done to overcome the obstacles to access capital.

The Inuit Investment Fund also used the capital in communities for Inuit loans and contributions to Inuit businesses. RL explained that the investment decision was based on the development of a business plan and probable viability. The business plan showed there is a market, resources, revenues, profitability, and
capacity is built within the community by employing some people from the community for a period of time. The investment fund provided after care to support and develop the entity with the entrepreneur. “If he is successful we can get our money back. If we are not involved with him, he can take the money and blow and we are out of it. Business has its cycle. If it is having troubles, we won’t close its doors. We will help him over the hump and get him through the hard parts.”

**High Cost of Transportation, Energy, and Materials**

Expenses were also very high. RJ mentioned, “More than 30 per cent of costs to build a home are the energy involved in transportation. It is discouraging people from getting into business.” Electricity costs were 21 cents per kilowatt hour (the Nunavut government subsidised an additional 61 cents per kilowatt hour) as compared to 7 cents per kilowatt hour in southern Canada. The extreme cold temperature lasted eight months per year versus four to five months of the year in southern Canada. In winter, blizzards were common and temperatures were 40 degrees below Celsius. The Nunavut government also heavily subsidised the price of oil. It usually purchased fuel on an annual basis between May and June for shipping in the summer months. The government offered fuel tax credits to mining and other companies operating in Nunavut.

6.7 **Inuit Measures of Enterprise Success**

Success was associated with enterprise survival and growth of sales. RJ indicated, “A measure of success was having an Inuit providing essential services. Small businesses [. . . is] still our weakness. ‘Greed’ has to be a part of the reason for getting into business. In the end, you must have ‘greed’ to be successful. A lot of our people hesitate to go all out.”

Another measure of success was using traditional knowledge and skills within the enterprise (RL, RC, RG, RH). Several respondents also indicated it was important to transfer traditional knowledge and skills to the younger generation.
For subsidiaries and funded enterprises of the Nunavut Development Corporation, utilizing local resources was also important. As discussed in Sec. 6.5, the number of jobs created and the retention of key staff and their on-going training and development were also important.

6.8 **Inuit Cultural Resiliency and Change**

The Inuit culture strongly valued adaptability and resiliency. For everyday Inuit, RJ explained:

> Survival techniques from 200, 100, and 50 years ago have changed. But still today, Inuit struggle to survive. If you are part of the transition up here, it is a natural progression for us [...] to this day. You have to change some of the tactics to survive. One of the new tactics for people who have no economic means, they become expert at using [...] the web of social welfare assistance.

The relationships with Elders may be changing. Previously, one absolutely followed their direction. Pressures from exposure to other cultures cause young people to question how things have been done and how they are to sustain themselves in the future.

RD: When an Elder said something you followed it absolutely. There was a social and moral fibre to your being there; you didn’t mess with that [...]. If your mother in-law came in the house and said she wanted it done, you did it without any question. In today’s age and times, the absolute authority is no longer there. As children grow become 15 to 20, they start thinking for themselves a bit. Start wondering what their place is in life. How are they going to sustain themselves? After a certain while, pressures hit them from the other cultures.”

RJ explained they have set up the institutions and political organisations to move forward. Compensation which accompanied the Land Claims Settlement had allowed for new investment in business. By purchasing stock in some resource companies, the Inuit had gained ownership and control. RJ saw this as an opportunity, “We can become gigantic owners in most resources not just joint ventures. Buy them out. Buy the leases. Financing is easy to get once you have the resources.”

Young people and adults were getting jobs. They were also enrolling in Arctic College and university. Even if they had left to go south, they wished to come
back. With distance delivery through the internet, Inuit also were taking classes at post-secondary institutions across Canada.

Technologies such as television, satellite dishes, computers, the internet, and iPods, enabled communities to access global information and see other cultures. I observed snowmobiles, all-terrain vehicles, vehicle parts, camping equipment, and carving supplies such as dremmels, cameras, iPods, and cell phones in the Northern and Cooperative stores. Even caribou had been tracked by satellite with specially equipped collars.

The dramatic increase in Inuit population on the same land base had been recognised as unsustainable. With 50 percent of their population under 23 in the 2006 Nunavut Census, Inuit were looking at job creation. Elders also have a reduced sense of fear since they have been able to see the impacts of projects in other locations and how the risks have been addressed. Computers and technology have changed their lives.

RL: The culture is changing and there has been an attitude change among the Elders […]. We want to go with the world, with precautions, with the safety factors. They [the Elders] have some comfort now. They saw how it was actually handled. The fear and paranoia is not as prevalent as 25 years ago […]. [They are] starting to realise there is 10 times the population they had 25 years ago on the same piece of land. They know it is not sustainable with the same land. Kids are happy playing on the computer. They are not happy slinging a bleeding caribou on their back or hiking ten miles. They take the ski doo and go get it. Technology and the world have caught up to us or vice versa.

The Inuit had also been impacted negatively by outside forces such as climate change, increasing pollution, and externally imposed laws. Interviewees commented on climate change creating unstable ice and melting snow and ice so caribou had difficulty accessing food. Pollution from outside was affecting their water, animals, birds, and whales. Other countries were making laws which affected how Inuit got their food and sold their products. Elder RB commented, “Older people don’t like that they make the laws here when they don’t understand anything. I don’t like the fact that Greenpeace makes laws for the north because they do not know what people go through here and we need the food.”
Not all change was seen positively and communities had to deal with resistance to change. The tribal makeup of the community could also complicate transitions.

*RL:* It is not so much the adapting, that is the easy part. It is deciding to change and leaving what you have that is the hard part. It becomes a real issue within another community. There is the makeup of the people who end up on council, on housing association boards and on education boards. This has an effect overall as to how fast somebody jumps on something.

6.9 **Learning from Others**

RJ, an elected official with the Nunavut government, was interested in alternative ways to reduce energy costs for Inuit and northern residents. This contributed to significantly higher costs of doing business. RD, a post-secondary college administrator, wanted to know more about the application of prior learning acceptance and recognition and different ways Inuit skills could be upgraded. Currently Arctic College offered only one trade training program.

6.10 **Conclusion**

Rankin Inlet has experienced continuous and significant change during the past few decades, and that change had impacted entrepreneurial activity among the Inuit. To summarise:

- Compared to other Nunavut communities, Rankin Inlet was more cosmopolitan and less dominated by one tribe or clan.
- Inuit history had Inuit role models who had demonstrated entrepreneurship through trade.
- Caribou harvesting had a long tradition among the Inuit, but in recent years fewer individuals had developed the needed traditional skills. Participants in the mixed economy provided money necessary to pay for the traditional activities.
- Inuit entrepreneurial activity in Rankin Inlet was hampered by many factors (e.g., Inuit cultural norms, lack of infrastructure, geographical remoteness, lack of education, business knowledge and role models). Thus the enterprises remained small.
• Inuit livelihood entrepreneurs were engaged in carving and sewing products for the local Inuit market as well as specialised items for the small tourist market. Carvings were generally sold to the cooperatives and Northern stores which then traded them in the international market.

• Inuit culture was kinship based and encouraged food sharing. Selling caribou had been viewed as inappropriate until recently.

• KAF had initially depended on local Inuit to provide the caribou for processing. However, targeting national and international markets required a dependable, quality source of caribou and Canadian Food Inspection for the permits therefore the company redesigned its facility and contracted with the HTO in Coral Harbour for the product from its commercial caribou harvest. The government had changed the regulations to allow for Inuit commercial caribou harvests.

• KAF altered its processes and products to provide customised caribou products for the Inuit in the territories and other specially prepared and packaged products for the high end chefs in the international market place. KAF also developed a special logo and branding to capitalise on the Indigenous heritage.

• The recent Nunavut land claim settlement provided Inuit with the rights to harvest caribou for commercial purposes and to form commercial enterprises to process caribou or use it for eco-tourism or other purposes. The financial benefits also provided capital for new opportunities.

• Inuit culture valued resiliency and adapting to changes. They recognised that the young Inuit population would require jobs so were opting to participate in resource and economic development but pragmatically and minimizing the risks but on their own terms. Sustainability was a critical concern. Elders were also accepting the need to change.

• Technology and climate change were impacting the communities but the Inuit people were adapting.
Chapter 7 is the second of five chapters which present the exploratory descriptive cases based on the research conducted at each field site. This chapter about Coral Harbour, Nunavut is organised in the following manner: community context, Inuit sustenance economy, Inuit livelihood enterprises, Inuit formal economy, and Inuit commercial caribou harvest/processing, barriers to Inuit enterprise, Inuit measures of enterprise success, Inuit cultural resiliency and change, learning from others and conclusion.

Table 7.1 Description of Coral Harbour interviewees

| CA: Inuit, male, elected president of NGO | CB: Inuit, male, entrepreneur |
| CC: Inuit, female, entrepreneur | CD: Inuit, female, worked with commercial harvest |
| CE: non-Inuit, male, administrator | CF: non-Inuit, female, economic development officer |
| CG: Inuit, male, emerging carver | CH: Inuit, male, emerging carver |
| Elder CI: Inuit, male, master carver | Elder CJ: Inuit, male, master carver |
| Elder CK: Inuit, female, master seamstress & doll maker | Elder CL: Inuit, female, master seamstress and doll maker |
| Elder CM: Inuit, female, master seamstress & doll maker | CN: Inuit, male, hunter |
| Elder CO: Inuit, male, hunter, worked with commercial harvest | CP: Inuit, male, worked with commercial harvest, entrepreneur |
| CQ: Inuit, male, a new entrepreneur outfitter | CR: Inuit female, made tourist items |

7.1 **Community Context**

Coral Harbour (Salliq) is the only community on Southampton Island. It had about 800 people with more than 95% Inuit. The island is the size of Great Britain. Rankin Inlet, the nearest community on the mainland, is accessible six days per week by air. However, most Inuit are unable to personally afford the air fare. A flight to Rankin Inlet cost CAN$350 to CAN$460 one way (with tax) and to Winnipeg cost CAN$1275 one way (with tax). Therefore, trips to the mainland only occurred if others paid for them, for example for obtaining medical treatment or attending conferences, school or meetings.
Calm Air and Kivalliq Air had small planes for the daily ninety minute flights to the mainland. Air charter companies such as Ken Borek Air Ltd. offered additional flights. Air luggage was limited to 80 pounds (which included the weight of all carry-on baggage). Freight rates were about CAN$2.50 per pound. The air strip dated back to WWII but the community received a new airport building in 2005. The Runaway Taxi provided the only taxi service.

Coral Harbour depended on the annual sealift to bring in the year’s supply of fuel, equipment, goods and non-perishables (including food). It had no port, only a gravel “spit” and wharf.

Coral Harbour had a local gravel road network – no roads were paved. People primarily walked or drove snowmobiles or all-terrain vehicles (“Hondas”). There were few cars but several SUV’s. Trucks usually belonged to the government or businesses. Some snowmobiles had plastic strips attached to the rungs’ fronts to keep water from splashing up. Snowmobiles pulled komatick (sleds) with attached wooden boxes large enough to haul the family or supplies.

Water was delivered to households weekly by truck and was carefully rationed. Septic tanks for holding waste were emptied weekly by trucks. Buildings were heated with diesel fuel which was delivered by trucks. The Hamlet operated a landfill garbage dump and waste sewage lagoon.

Coral Harbour had a small building for Arctic College classes; three churches – Catholic, Anglican and Pentecostal; a recreation facility and pool hall; a small hospital/nursing station; a two-person RCMP detachment; an Aboriginal Head Start Program, a day care centre; Sakku School for K-6; high school; the Sudligvarluk (FM103.9) radio station; a Nunavut Power Corporation facility; large satellite dish; two retail outlets - the Northern Store and the Katudgevik Co-operative Ltd (which also served as the local post office) and the Esunqarq Hotel (since closed).

There were no banks or credit unions. Community members used the ATM machine and did light banking at the Northern and the Co-op stores. However, they were not able to cash a personal cheque. Therefore, I paid honorariums with
cash or postal money orders. Unlike many other northern and First Nations communities, Coral Harbour had no buildings for sewing, carving, wood working or crafts.

Leonie’s Place was a small hotel and trading post which the co-owner described as a sewing and camping store. Fur and hides tanned in southern Canada were sold at the Co-op, Northern and Leonie’s. CC explained using these for sewing and art projects was important as items made with local furs got a “rank” smell and possibly maggots. To show me the tanning and detailing of the caribou skin, an Inuk woman removed her boots and amauti from the freezer where they had been stored for the warmer months.

### 7.2 Inuit Traditional or Sustenance Economy

The caribou on Southampton Island had disappeared in the 1950s after the whalers, traders and military base arrived. Caribou were brought back to Southampton Island in 1967 by plane. Initially the Inuit agreed not to use these caribou for subsistence hunting so they hunted on Coates Island. The herd on Southampton Island grew as it had few predators. According to RF, “[In] 1987/88, Inuit were allowed one caribou for two families; the next year, two per family. The year after that they did a survey [and said] shoot as many as you need, there are lots.”

An Inuk woman explained, “We use all of the caribou except its skin and thing - eyes, brains, stomach, intestine, even hooves. We boil the hooves a long time until they are soft.” As she said “thing”, her hand swung in front of her pelvis. She added, “We do not sell it, we share it. We use the caribou hide. We scrape it, dry it, work the hide with tools, and then make clothes. The hide is different thicknesses depending on the season. It is best from the fall.”

The Inuit hunter was still valued and had prestige. They used the same skills as their ancestors. Elder CN told about key hunting skills and abilities such as understanding the weather and the snow, ice and water; having sharp eye sight and hearing; tracking the animals and distinguishing the number, sex and health of the animals; living on the land; and Inuit traditional medicine. I was given
videos to watch – one showing a father teaching his son to hunt, the other showing local hunters supervising a southern bow hunter on a polar bear hunt arranged with the Aiviit HTO.

The Inuit said they would starve without the subsistence harvest. Imported food was very expensive.

CE: In Coral Harbour, the cost of a food basket for a family of four if purchased locally is CAN$675 for a week. If this was purchased in southern Canada, it would be CAN$150. Although locals pay heat and hydro of 21 cents per kilowatt because it is government subsidised, the real cost is 71 cents per kilowatt. Transportation also costs 60 cents per pound to fly it in.

Some people used the federal government food mail program which subsidises the cost of essential items. The perishable foods such as fruit and vegetables came in once a week and disappeared quickly from the Northern and Co-op stores. I found the prices were often double those in Regina, Saskatchewan for similar items and the selection was much more limited. The Nunavut government paid the Northern Living Allowance to teachers and other employees to make up the difference between the cost of living between Coral Harbour and larger southern centres in Canada. For 2005-2006, the NLA was CAN$19,162 (GNU, 2005, p. 3).

The Inuit ate caribou, seal, walrus, polar bear, ptarmigan, geese, duck, Arctic hare, Arctic Char, cod, and mussels. They also gathered berries, leaves, moss, plants and bird eggs. A young Inuk said he shot his first caribou at the age of five.

The Inuit dried, cached or salted food for the winter. Women primarily did these tasks. Coral Harbour was one of the few northern communities without a small meat processing facility. The very old community freezer had no electric cutting equipment or saw. Hunters cut up their own wild game and birds. In the Inuit homes, I saw cardboard on the floor where game had been cut up and caribou portions sitting in the entry way or on kitchen counters. Some homes had electric freezers. Inuit still practiced food-sharing among the community. They also sent meat off the island to family members located in other communities to
ensure they had traditional food or to help with food when harvests were low. Caribou hides and antlers were attached to the sides of houses for drying. It took the hides from eight to ten caribou legs to make a set of mitts or the front of kamick.

Figure 7.1 Caribou skin from leg for mitts or boots (photo by Aldene Meis Mason)

Using a value of CAN$17 per kilo of beef sold in Kivalliq stores, the replacement value for a caribou would be CAN$629. Therefore, the value of the resident subsistence harvest of caribou on Southampton Island was about CAN$924,630.

7.3 Livelihod Enterprises

The Nunavut government classified arts and crafts, enterprise hunting and clothing production as livelihood business. The following types of Inuit entrepreneurs used parts of caribou in their products: carvers, jewellery makers, doll makers, clothing producers, eco-tourism guides, and outfitter/hunting guides. Although the Inuit had extensively used caribou for traditional purposes, other than the meat sale to KAF, little had been commercialised. Although I saw caribou hides being used to line the snowmobile and komatic, none were tanned and sold in stores in the Arctic or available in the stores I visited across southern Canada.

On both field visits, I asked to purchase caribou meat from Inuit. Each time a male Inuk brought a nice roast out of the freezer. While paying, I said the money
was for a tank of gas to go hunting. The family had departed within an hour on their snowmobile pulling a komatic for a camping/hunting trip. Later I was chastised for buying the caribou. However, caribou meat was sold on the radio.

Producers of clothing, sewing and craft items listed in business directories included Natuq Sewing, Aggiq Seamstress, and Rhoda’s Bridal and Crafts. Nearly all of the local businesses associated with caribou were lifestyle, owner-operated, first generation and in survival mode.

**Carvers**

Inuit traders came to the door of the hotel within two hours of my arrival. They had carvings, jewelry, prints, ulus (traditional Inuit knife), rings, necklaces, pendants, broaches and earrings. One trader had jewelry made from gold and silver. The opening price was CAN$240 for the walrus in gold, CAN$120 for the arctic char in silver, or CAN$60 for the polar bear in silver as they were different sizes. Another trader had masks (the size of faces) made from the valued Coral Harbour limestone. A female Inuk trader wanted CAN$40 for the famous crocheted hat. The traders returned several times to show different products. Earrings and broaches featured *inukshuks*, drum dancers, and wild-life such as ptarmigan and seals. A set of caribou earrings carved like a mortarboard could be used for a graduation gift.

I noticed a different pattern of trading. When asked what they wanted for the carving, the Inuit would give a high price like CAN$60 then immediately follow with a low price like CAN$30. I thought this meant I should pay the CAN$30. Later CB explained that this was common practice and I should probably bargain to pay between the two price levels.

Caribou inspired arts and crafts and provided materials such as skin, antler and bone. Carvers’ themes included Inuit legends and stories as well as the traditional roles and activities such as drum dancers, women in *amauti* collecting water with caribou pails and ladles (see Figure 7.3), and *inuksuk* (used to attract the caribou or serve as landmarks for hunting sites). Local Coral Harbour carvers such as Bobby Eetuk, Lucassie Nakoolak, Daniel Nakoolak,
Henry Nakoolak, and Elders Mark and Jamie Nakoolak made their sculptures from caribou antler and bone, walrus tusk and bone, stone, mollusc shells and other materials. I was told Coral Harbour currently had no lady carvers but there had been. Carvings ranged in size from two inches to three feet high. Although Coral Harbour has a unique limestone, carvers commented on the shortage of appropriate carving stone. An Inuk mentioned slate from the pool table in the recreation facility had been recycled for carving.

Carvers sold their products to tourists, teachers, nurses, and few other people visiting the community. A young Inuk took me to a friend’s place where I was shown a room full of large carvings which he had purchased to sell in the south. Otherwise, the carvers primarily sold their products directly to the local Katudgevik Cooperative Association Ltd. and the Northern Store. Leonie Nappa Duffy of Leonie’s Place was also legally registered as an Arctic Trading Company and had posted hours for the traders to sell their carvings. One Inuit carver wanted to have an internet web site but lacked the marketing skills as well as a method of handling payment transactions (CG). I visited the Co-op’s carving store to purchase carvings. The Hamlet also encouraged the local carvers to have a couple carvings on hand as inventory. CF commented, “This is difficult because they need the money so can’t wait.”

The carvers learned their art form by watching their parents, grandparents or uncles. The Elder carvers had learned in the 1940s – some while staying in the hospital. Sometimes carvers had the opportunity to attend workshops or trade shows. CG and CH tried to learn by looking at photographs of other carvers’ works. Bobby Eetuk’s carvings were displayed at the first Northern Lights Trade Show in 2008. Arctic College had recently offered a short jewelry making course locally. Longer courses were available at their main campuses in Iqaluit and Rankin Inlet.
Figure 7.2 Inuit carver in Coral Harbour (photo by Jim Mason)

Figure 7.3 Carving of Inuit woman with caribou pail and ladle (photo by Jim Mason)
Emerging artist CG did not carve dancing animals; instead he focused on realistic portrayal of animals and people doing traditional activities. CH liked to do dancing polar bears and walruses standing on one leg. He used smaller pieces of stone to make seals. Elders CI and CJ showed me beautiful carvings of caribou antler and bone. Their work often incorporated animal, marine mammal or bird images (sometimes mixed with human faces). These art works were for collectors and had no “useful purpose”.

The Elders explained how they used the traditional tools of files, axes and hammers when carving. Today, some carvers used electric dremmel tools to cut, carve, grind and smooth the stone. CG and CH used a three inch electric angle grinder to rough out the piece. They also used axes and files. Carvings were finished and polished by hand with several grades of sandpaper. (In comparison, a New Zealand Maori carver had adapted the old Singer sewing machine and used its belt to do sanding and polishing). When I asked if the carvers prayed before removing the rocks from the beach and ground, they laughed. (The Maori carver in New Zealand had said he did this to thank the creator). The carvers indicated they now made rings, pins, and earrings as well as the larger traditional sculptures. Some carvers mixed “Crazy glue” with caribou bone or antler shavings to glue backings on the earrings and broaches.

Unlike in the First Nation communities in southern Canada I had visited, I saw no carving shops, dedicated buildings with a carving facility, or carving shops located garages outside homes or in basements. The Inuit carvers were working in abandoned packing crates or outside (see Figure 7.2). They had created work tables from recycled school desks or discarded electric wire spools. To avoid breathing the carving dust, a few carvers wore compressed paper masks while others used nothing. Few occupational health and safety practices were in evidence.
Seamstresses

Elders CK, CL, CM were known through the Kivalliq Region for their traditional Inuit clothing. They used caribou and seal to produce parkas, pants, mitts, and kamick (an Inuit boot). A pair of adult kamick with duffle socks cost about CAN$400. They also made the traditional amauti (the women’s parka) which had a deep hood at the back to carry babies and small children (see Figure 7.4). Several seamstresses also sewed small jewelry items such as pins.

Elder CM indicated she had always sewed for her family then she began receiving requests for her products. Usually clients (even in other communities on the mainland) had heard about the expert seamstress’s products through word of mouth. The Elders reported receiving requests from other parts of Canada and other countries. CL’s sewing business, formed in 1996, was listed on the Inuit Business Listing website and the Hamlet’s website directory of local businesses. Unlike the carvers, the seamstresses’ clothing was not bought directly by the local Co-op but could be placed there on consignment.

Inuit women traditionally used their hands and fingers to measure the body for sewing. Often the women did not have paper patterns. Elder CM used measuring tapes. When she was asked to make kamick, Elder CM would check the buyer’s boot size and from there she knew the different angles and sizes.

Elders CK, CL, and CM explained that skin preparation, measuring and sewing techniques, patterns, and designs were passed down from grandmothers, mothers and aunts. As children, they were not taught but learned by observing and then helping with the sewing. Now, Elders CL and CM delivered workshops teaching women and youth to sew. Elder CM commented, “I am not just teaching them how to sew and cut the pattern. When Inuit were children, their traditional culture was passed down verbally. It is not on paper therefore our young people are losing it. White people write everything on the paper, it is opposite.”

Skins and hides were usually provided by family members. Elder CL indicated, “She worked only with what her husband had caught and she had processed as the hides were in better condition.” The women then scraped, cleaned, softened,
and stretched the skins. Several women told how family members had carved special handles to assist them in holding their *ulus* and other tools.

The seamstresses also reported innovation and adaptation in their enterprises. Elder CL used sanders for wood to take the skin off the hides. Traditionally the women chewed the skins with their teeth to make them soft. This had worn the teeth to the gums. Elder CK demonstrated the use of large wooden boards joined as a lever and equipped with plastic teeth inserts to soften the skins. Elder CM also used this Inuit tool. Elder CL used wide flat nose pliers to soften the skin. Some women softened the caribou skins with Downy fabric softener; however Elder CM rarely used these cleaning products. Elder CK traditionally used beluga sinew or caribou sinew (which is not as strong) to sew with. More recently she has begun using waxed thread for some products. When I returned in 2010, several Inuit women mentioned they were again using caribou sinew thread because it did not break as easily and performed better when the skins got wet.

Figure 7.4 Woman’s amauti made from caribou; pouch is for carrying baby (photo by Aldene Meis Mason)
Elder CL previously had no patterns but now she has designed some to put on the skins. Elder CL used little English and found this was a major barrier when communicating with customers. She had worked around this by having customers leave messages and then her daughter would return the calls. Her daughter recently had developed a product and price list in English. Elder CL’s company owns a computerised sewing machine to embroider flowers on coats, *amauti*, and pants. I also saw the women’s sewing skills applied in other areas. Some Inuit sleds had covers made of cloth attached with zippers for ease of removal.

**Doll makers**

Inuit girls always had dolls made by their families. Ikkummak Ivvaluajuk mentioned her sisters made traditional Inuit clothes for her daughter’s dolls. Doll making was also how Inuit women taught girls to cut and sew hides and to make clothing. Now the art of doll making was being revitalised to make dolls for commercial sale. Several Inuit women had attended a week-long doll making workshop in Rankin Inlet delivered by a professional doll maker. Elder CK went to the workshop then trained several women in Coral Harbour. I was shown the traditional Inuit dolls the women were making. These were dressed with clothing sewn from left over pieces of caribou and seal skin. One of Elder CK’s dolls even had the traditional Inuit crocheted hat which several Inuit men in the community were wearing. These Inuit hats sold for about CAN$50.00 in Rankin Inlet stores. Elder CK indicated that her first doll faces and heads were made from baked modelling clay (provided at the workshop). The terms of the government project sponsorship did not allow her to sell any dolls which were made from materials provided at the workshop. As she did not have more material for the faces and heads, Elder CK was going to make these from other local materials like stone, wood, bone or ivory. Collectors paid CAN$400 - $600 for Inuit dolls which stand about 12 inches high. The Elders explained that they used the dolls to tell stories and legends. Doll making had provided a way to transfer their knowledge to the younger generation and teach sewing and beading skills.
7.4 The Formal Economy

The formal sector of the economy was reflected by firms having licenses or registrations with government bodies. Coral Harbour had 4 enterprises listed on the Inuit Business Firm Registry; 9 on the Nunavut Business Registry; 12 on the Inuit Business Directory sponsored by PAIL (only 4 of these were actually local Coral Harbour businesses); and 26 on the Canada Nunavut Business Centre website (a business may be listed with more than one category). The Hamlet had issued 30 business licenses to about 22 different enterprises in 2007.

Formal enterprises directly associated with caribou included Aiviit Hunters and Trappers Association, the Coral Harbour Development Corporation, Katudgevik Co-op Association Ltd (which sold carvings), the North West Store (which also sold carvings), Leonie’s Place (which sold sewing supplies, was a registered Arctic trader, and provided accommodations for sport hunters of caribou). The listed outfitting operations included: E & E Outfitting, Eleven Mile Trek (11-Mile Trek), Anguitimmarik Outfitting, Kajjaarnaq Arctic Tours, Locked Antlers Outfitters, Aiviit Hunters and Trappers Association, and Esungark Hotel – Inns North. These companies offered polar bear, walrus and caribou hunts. Kajjaanaq also offered marine eco-tours, and walrus and polar bear tours.

I looked at spinoff effects of the commercial caribou harvest and outfitting businesses. Calm Air International and Kivalliq Air would fly in business and government representatives and private hunters. Expediting, contracting and equipment supply would be provided by six businesses: Coral Harbour Automotives, NMM Enterprises, Noel’s Maintenance, Sanalagu Maintenance, Suqliq Developments Ltd., and Tunniq Lumber & Supply.

Both the Northern Store and Katudgevik Cooperative Association purchased carvings from local Inuit. These were then purchased by their national head offices. Each piece of art purchased from the Co-operative had a distinctive tag with an igloo certifying the artwork was handmade by Canadian Inuit. I also found the artists, the community, their mark, their products and some pictures of their products on the CAP website.
7.5 Inuit Commercial Caribou Harvest

The caribou population continued to increase and the Inuit became worried that there would be no food for the caribou and the population would crash. The Inuit had already experienced a period when there was no caribou. At that time, they had completely depended on marine animals and other species to live. By the early ‘90s, meetings were held with community leaders, hunters, elders, government officials, and wildlife managers.

RG: Based on the vegetation that was available, we were going to get to a critical point where the herd would crash due to increased incidence of disease or starvation [...]. In 1994 a small caribou harvest herd management exercise was allowed to reduce the number of caribou by 1000 to 1500 animals.

Because the caribou population on Southampton Island was unique, the Inuit were allowed the license for a commercial harvest. The government’s objective since the commercial harvest’s beginning had been wildlife management to limit the herd growth. Reasons for allowing a commercial hunt on Southampton Island included: the limited human population, no other community depending on the herd for food (as the herd did not migrate off the island), the absence of other territorial or provincial government involvement, and the characteristics of the Southampton caribou population (a high pregnancy rate, low calf mortality and few predators).

RG: On the mainland caribou have a variety of natural predators including polar bear, grizzly bear, wolves, wolverines. They migrate therefore they are hunted by multiple communities. A dozen communities in total, about a population of 5,000 to 10,000 people, are hunting this one herd. The caribou pregnancy rate is low and calf survival rate is much lower - part has to do with climate, part has to do with the quality and quantity of food that is available. [On Southampton Island] caribou have limited natural predators. A few wolves [are] on the island but a variety of species like bears don’t exist there. Pregnancy rates were as high as 95 per cent that tends to fluctuate a lot depending on the conditions.

Local hunters up to the late 1990s harvested, processed and sold the local caribou from the commercial hunt across the NWT (which then included Nunavut). They then sold the caribou to a buyer in Ontario and later started selling to KAF in Rankin Inlet.
Aiviit Hunters and Trappers Association (Aiviit HTO) of Coral Harbour had been directly responsible for the Southampton Island commercial caribou harvest since the pilot in 1995. They had received money from the federal government to upgrade their skills. At first the HTO ran the commercial harvest referred to as the “Tunnuq” caribou harvest project through a business arm.

RG described how the opportunity to sale caribou internationally was recognised.

*RG:* In 1997, people started to recognise there are economic opportunities which come with job potential and export markets around the world may be interested in it. Wild game has become a huge market on its own worldwide […]. The NDC sat at the table with the HTO, Hamlet Council, elders, and local leaders. Let us explore this. Over a couple, years it became a commercial harvest. Product shipped here to Rankin Inlet and then shipped throughout Canada.

In 1997, the Nunavut Wildlife Act was revised to allow a quota for commercial licenses large enough to justify a production operation for national and international export which met Canada Food and Inspection Agency standards.

The first few years, hunters had lived in tents on the land and the processing was done in a tent with a snow floor and portable sheds (see Figure 7.5). The portable abattoir took advantage of the -40 degree Celsius weather to quick freeze the caribou suspended on metal racks outdoors. A local Inuit leader commented, “The harvest did not make much profit.” CA indicated Aiviit HTO put out a request for proposals to run the harvest and a Coral Harbour company owned by local Inuit, won the contract from 1999 to 2002. It was profit oriented and this provided incentive to hunt more male caribou as these yielded more meat. Coral Harbour had approached the Nunavut government in 2001 about having its own permanent meat processing facility but was unsuccessful.

When the contract was up for renewal in 2002, Aiviit HTO again solicited bids because of environmental and other concerns. The Coral Harbour Development Corporation (CHDC), a community development corporation, was created. CHDC was responsible for the harvest from 2002 to 2004. According to RF, an Inuit who was the harvest manager at that time, “CHDC increased the number of
animals harvested to over 5,000 and achieved the target of 60 per cent female and 40 per cent male caribou.”

Figure 7.5 Old commercial caribou harvest (photo provided by Richard Connelly)

The portable abattoir was upgraded to meet increasingly stringent Canadian Food Inspection Agency standards as well as to achieve the coveted European Union certification. CHDC made considerable investments in improving the infrastructure and harvest processes. It purchased everything necessary for the commercial harvest to meet the CFIA standards including tools and equipment, furnishings, lighting, generators, storage bins, and refrigeration.

CP elaborated on the improvements. Today, the kitchen was in three sections, with a cooking area, serving area and mess hall. Instead of one sleeping room, double duplexes were permanently located on skids as wide as cabins. The grey water from the kitchen and bathroom now drained through a pipe into a bag on a low profile komick. When the bag was full, it was tied off and dragged away to suitable disposal areas to ensure the lakes remained clean. Other improvements included washrooms and shower facilities. The processing facility had separate designated areas for the abattoir to reduce the potential contamination. These buildings were all portable and located on dual skids to allow for towing. Understanding the impact of northern climates and extreme temperatures, flexible hosing was used for piping the water. A generating station was created to power tools and lights and to ensure adequate supplies of boiling hot water. Stainless
steel equipment, saws and tools were purchased to ensure better hygiene. Stainless steel bins were developed to hold the innards.

The commercial caribou harvest built upon the existing Inuit traditional knowledge of hunting, living on the land and meat processing. CO explained the key attributes of hunters associated with the harvest included: understanding of weather, snow/ice and animal patterns; distinguishing caribou sex, age and health; patience; eyesight; physical agility; adaptability, physical endurance; and seizing the moment. Seven to twelve Inuit hunters were hired for the commercial harvest annually on a competitive basis using several criteria. Expert hunters accurately identified male versus female caribou. They received an incentive per animal as well as per head shot. RF said that the hunter’s skills were “awesome”, achieving 97 per cent head shots. The CFIA rejected all caribou which did not have head shots. Many of the same hunters were involved over several years and had invested in better rifles and scopes. They still used the .270s as it still had a flat trajectory over the normal shooting range – and the shells cost less than the “bigger” rifles’ shells.

If the CFIA rejected caribou from the harvest for commercial sale but deemed them safe for human consumption, these were taken back to Coral Harbour and distributed. This practice was confirmed by the Southampton Island Commercial Caribou Harvest Operating Guidelines filed for the Environmental Impact Assessment.

Camp efficiency was increased by working with a quality assurance expert and training the operators. RF indicated, “It now takes 10 minutes to shoot the animal, drain the blood, and gut the animal, and separate the joints. From the time the animal arrives at the abattoir, it takes about 1 minute and 15 seconds to skin and trim the animal.” As well, KAF in Rankin Inlet had transferred considerable experience in the meat processing to the workers. As the camp efficiency increased, the harvest required a lot less people.

Traditional knowledge of hunting and living on the land was crucial. The location of the camp to minimise the travel between the kill and the abattoir was important. CE commented “What could normally take four months, now takes
five to six weeks. The hunters harvest and transport 5,000 to 6,000 caribou
during this period. The dead animal must reach the portable abattoir within one
hour of being killed.”

Inuit women traditionally cut up and cooked the caribou. Today, women worked
with the commercial harvest as cutters, packers, and camp cooks. An Inuit
woman said she had worked as a trimmer for nine years.

Although the harvest built on traditional hunting and processing skills, new
methods and tools were necessary to achieve international certification and to
create caribou product with market appeal. During 2002-2004, the commercial
caribou harvest was inspected and received European Union approval. This was
an incredible achievement. The commercial harvest had to continue improving
its operations as the EU certification was reviewed every three years.

In the early years, the harvest had used “Bombardiers”. These were very large
snow machines, not the smaller common snowmobiles. New equipment using
the Bombardiers and “Cat trains” for hauling had reduced the trips from 500 to
50. Damage to the land and vegetation as well as environmental impacts and
fuel use were greatly decreased. CHDC started to look at using wind and solar
energy but learned solar did not work when it was below 20 degrees Celsius.
Not a lot of the technology had been tested in the cold weather Arctic
environment. Reducing the need to haul diesel fuel on the land would avoid the
risk of contamination from possible spills. In 2010, I learned the harvest camp
had been moved closer to the community so it could hook up directly to the
power grid.

Aiviit HTO ran a competitive bidding process when the 3-year contract was up for
renewal in 2004. A local entrepreneur was awarded the contract to manage the
harvest. CHDC, the community enterprise, continued to own the portable abattoir,
buildings and equipment.

All of the Elders commented that the harvest was important to the community
and they were very proud of what it had done. The commercial caribou harvest
had grown from 2307 caribou in 1995 to 5003 caribou in 2003. The allowable
commercial quota was set at 6000 caribou until 2008. The Coral Harbour commercial caribou harvest and its partnership with KAF in Rankin Inlet had very positive outcomes in terms of employment, dollar return to the local economies and development of the Inuit presence in the global economy. Many Inuit expressed pride in the commercial harvest and the employment it had brought to the community.

In 2005, Robert Connelly, the Manager of Economic Development for the GNU, had explained the impact of the commercial caribou harvest on the community to me. This was Coral Harbour’s biggest project of the year. At peak, it employed 68 residents and 99 percent were Inuit. Eighty percent of those employed had returned each year. The annual payroll was about CAN$500,000 in direct employment. The majority of camp workers had put in enough hours to qualify for unemployment insurance benefits – CAN$150,000. Economic spin-offs were a minimum of CAN$2.9 million ($650K x 4.5) for this non-decentralised community. The harvest maintained an infrastructure investment base of CAN$500,000. It also maintained and built on a strong reserve of expertise among local residents. The harvest also helped keep caribou population in control (which was the purpose of the hunt). Additional economic value also came from the use of caribou skin for clothing, bedding and doll making as well as the use of antler and bone for carving.

Inuit culture discouraged waste therefore Aiviit HTO had used the internet to explore what to do with the hides, antlers and bones. Some caribou hides were sent to a tannery in southern Canada in 2003. This tanning experiment was unsuccessful. The tanned hide had many holes left by warble flies. I thought of potential products which had holes such as golf gloves and leather skirts with a lining. RG showed me caribou mitts with Robin Goodfellow-Baikie’s label. These had been using the patented caribou fur felt - a fabric made from mixing caribou hair and wool. RG and CE commented that CHDC and the Nunavut government were exploring purchasing the rights to this technology.

Local Inuit hunters expressed concern about the declining herd population and the health of the herd. This was confirmed by the GNU Hansard and NWMB (2005).
The Nunavut Government had an aerial survey done of the island’s caribou population. The harvests continued in 2005, 2006 and 2007. During our interviews in 2007, local residents suggested three reasons for the caribou population decline on Southampton Island. Melting and refreezing ice had covered the vegetation and made it difficult for the caribou to feed. Caribou possibly were walking over an ice bridge to the mainland. Some caribou were sick. Initially scientists recommended that the commercial harvest should be reduced to 2000 caribou. However, the Nunavut government suggested suspending the commercial harvests on Southampton Island until the caribou population could be restored. Then, subsidies could be provided to support hunting for domestic purposes so caribou could be sent to other Nunavut communities. If the commercial caribou harvest was cancelled, KAF had indicated to me it would need to look for other suppliers of caribou or wildlife products to keep its Rankin Inlet operation sustainable.

In 2007, the community again submitted a formal proposal to the Nunavut Government asking for a local commercial processing facility. This was creating tension with KAF. After the ice and snow had melted from the land, the hides and carcasses from the commercial harvest were burned and buried.

The Coral Harbour harvest was unique. Wildlife biologists were located at the caribou harvest site along side the CFIA inspectors. The biologists had determined that some caribou on Southampton Island had brucellosis. As a result, the female caribou had lower pregnancy rates and higher rates of natural abortion. As there was little experience with brucellosis in caribou populations, the wildlife biologists were uncertain how long it would take to return to higher numbers. In the meantime, the Inuit on Southampton Island could continue to harvest the caribou only for sustenance (subsistence) purposes.

RH said the 2008 commercial harvest was cancelled but a smaller hunt of about 200 caribou took place and the caribou meat was used for inter settlement trade to the Baffin Region. The commercial harvest was reinstated in 2009. The CFIA and GNU biologists were continuously onsite during the commercial caribou harvest and closely inspected every animal to ensure it was fit for safe human
consumption. When I returned to Coral Harbour in August 2010, only a small commercial harvest for inter settlement trade had been held that year.

7.5.1 **Regulating Subsistence and Commercial Quotas**

Several Inuit commented that the quota system also was changed to allow for the commercial harvest. Setting the quotas was the responsibility of the NWT Wildlife Management Board. With the signing of the *Nunavut Land Claims Agreement* (NLCA), Inuit received the rights to harvest, process, and sell caribou but under certain conditions without a commercial license. They maintained their right to harvest in the Nunavut Settlement Area (NSA) up to the level of his/her economic, social, and cultural needs. They also could freely dispose of the caribou by sale, barter, trade, exchange or giving within or outside the NSA.

The NWMB set the quotas for the caribou harvest annually. Commercial quotas were set only after all other needs for caribou were satisfied. The commercial quotas were adjusted based on: the actual harvest levels; the availability and accessibility of wildlife; and the general economic, social and cultural conditions and circumstances of the Inuit including their nutritional needs and demography. In setting the subsistence and commercial quotas, these conditions and circumstances factored in both the needs of Coral Harbour and other Nunavut communities.

The NWMB could allocate the surplus caribou for existing sports and other commercial operations and to provide for the priority harvest by HTO for viable economic ventures designed to benefit the Inuit. Allocation of commercial licenses was prioritised based on the level of direct benefit to the NSA economy through employment of local human and economic resources. Each commercial license was granted only for a period of three years. The NWMB regularly conducted the Nunavut Wildlife Harvest Study to ensure sustainable harvest levels are maintained. These commercial quotas were set annually through a consultative process.

RE explained how tensions could occur when setting the quotas for subsistence and commercial purposes.
RE: The caribou are on a down cycle in the Western Arctic. It is quite controversial. They are cutting back quotas. The first ones to get cut are the outfitters because they are the commercial enterprise. It makes sense from the social perspective. The food is the most important so that is your priority. You have the aboriginal population; the non-aboriginal population, and then the commercial enterprises. When you are cutting you go in reverse. The commercial enterprises have invested a lot of money in building up the outfitting, the plants and the clientele. They are cutting a few hundred tags whereas the domestic hunters are hunting as much as they want.

Several Inuit said the caribou count was down because caribou had travelled over the ice from Southampton Island to the mainland.

CA: At the beginning [it was] 6,000 animals. After the GN [Nunavut Government] did the survey, the quota started going down. So last February up to March, they hunted about 2500. The herd was getting smaller. Because three years ago we had a very bad season, some storms. Some caribou were just dying.

RG of the GNU commented on the consultation in setting the caribou quota.

RG: In 2001-2003 harvesting levels were increased with the wildlife management groups, community, elders, and Department of Environment for Nunavut. They set quotas on what they thought would bring those numbers down. In 2002 or 2003 it was set for 5000, since then it has hovered around 4000. As look more at population and pregnancy rate, they have scaled back a bit. Now quota is set at 4000 per year. That is subject to consultation with local HTO and consultation with elders. (RG)

The GNU had conducted an aerial survey of the caribou population and consulted with the hunters to determine the size of the caribou population. RI commented in 2007 about the uncertainty and being unable to count on a commercial harvest. “[Each year] they say what the numbers are going to be. That is the first hurdle. We cannot say there is going to be a harvest. If the numbers are too low, there is no harvest.”

7.6 Barriers to Inuit Enterprise

Many of the local businesses were small and in survival mode. RF commented, “Success is measured if they eat that day or if the hydro is getting cut off or not. That is how they survive up here. Everyone needs the money today and can’t wait.”

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Similar to Rankin Inlet, significant obstacles to business development included: lack of business knowledge, skill, and education; living in public housing; lack of infrastructure; remoteness, limited size of the local market and poor connection to outside markets; high costs such as transportation, energy, materials; limited access to financial resources; communication; difficulties sourcing and paying for input materials; lack of lighting (winter 24 hours darkness) and Inuit culture such as sharing caribou and “living today”.

I was told, the Inuit had “lots of wonderful ideas, but they lacked an understanding about what putting a business together is all about […]. The good ideas start but are never completed” (CF). I also met Jake Nester, an Inuk who had invented and applied for the patent for the X-Flo intake manifold. This was sold over the internet for the Polaris, Ski-Doo and Arctic Cat 800cc models and distributed across Canada.

Several Inuit identified that money management had been a problem with their enterprises. Elders CI and CJ explained how the trading posts had not given money instead they had received wooden sticks and entries were made in a book. However they commented that it is different now. Elder CL required complete payment up-front to ensure that she was paid. Other Inuit business operators indicated it had taken time to learn to cover their material and replacement tool costs. The Hamlet’s Economic Development Officer had recently arranged with Arctic College to provide a basic bookkeeping course.

Inuit had developed business knowledge by sitting on the boards of the local co-operative, the HTO, the CHDC, and other businesses. The co-operatives also had provided training for board members. (I had designed and delivered the first training course for managers of cooperatives in Canada’s Arctic in the 1991.) Inuit had also gained business knowledge by working in the local cooperative and Northern Store as well as for the hamlet office. Some families with construction and business skills had started businesses and then diversified into several small businesses. Several of the younger Inuit mentioned to me they were going to study business at Arctic College or another post-secondary institution.
Southampton Island had little tourism. Travel was so expensive the island’s visitors generally were there for business purposes. The hamlet had been trying to increase the market for local products. The EDO had photographed the products and provided business cards for the small enterprise owners, artists and crafts people. The hamlet had purchased display cases for its offices and the airport to show samples of local products.

Inuktut was used all the time. Most people were not comfortable in English although children learned this in school. Elder CL used an answering machine to handle telephone calls so a family member who spoke English could return the call and speak with the client. Some Inuit reported that they needed help to fill out forms and deal with the federal and Nunavut governments.

The lack of capital was also a problem. Many Inuit lived in public housing and operated informally as they were not able to register as an Inuit business. The EDO helped the local Inuit to identify grants and fill out the forms to take maximum advantage of the small tools grants and the Hunters and Trappers Support Program (which assists with purchasing sewing machines and hunting equipment). The EDO indicated the tools would enable the Inuit to make the products faster. Support for the development of the individual enterprises had included direct grants for machinery and equipment, skills training and workshops, participation in trade shows, and use of the internet to connect with global markets. The Hamlet also lobbied the GNU Economic Development & Tourism Department and then tried to set up alliances so they worked together and with the Kivalliq Partners in Development for skills training programs and grants.

Inuit culture also could get in the way of setting up enterprises. CE, suggested “the Inuit still live for today and don’t worry about tomorrow”. In contrast, several Inuit had mentioned how their families had traditionally cached and dried food for future use. An Inuk carver indicated that the value of sharing had affected his enterprise as another carver had imitated his work. Community politics could also be an obstacle. An Inuk commented, “If you are a powerful
family in the community, everything flows to your family. As the area is so condensed it is really evident.”

CF: They are still focused on the land. Even if they are in wage employment, they are still thinking about getting the caribou after work. They do not have the tools or knowledge to adventure out past Coral Harbour. Even going to Rankin Inlet is a big event. People do not want to leave the community. This is home. The family is really tight here. Being a way from the family a week, is a very long time and everyone suffers.

The Hamlet was trying to use the web to provide a direct link from the artist to the market. Each community listed its products and the producer on an internet site. RF added that this would enable the artisan to receive money directly and retain more of the value without losing what the southern companies gain in big mark up. It was difficult to find someone in the community with web development skills. The Hamlet had been exploring making other products made with caribou such as tufted pictures from hair, buttons from antlers and caribou fur felt. RF commented, “The best asset is tourism if we could just get the people here. We are looking into eco-tourism and adventure tourism as the Coral Harbour is very traditional and this is a potential selling feature.”

One interviewee mentioned that the uncertainty from year to year about the commercial quota for the caribou harvest made it difficult to for the enterprise to operate. The commercial quota may also make it difficult for new entrants to become involved in Inuit enterprises because the caribou may already be designated for another use.

7.7 Inuit Measures of Success

Most Inuit enterprises were still in survival mode. Many Inuit indicated the income assisted in supporting their families. Commenting on profit, an Inuk said, “Not too much and not too little for everybody.” However, being too successful could also be resented. An enterprise needed to have a strong community focus. As well, the enterprise needed to create jobs and employ and train local people. The Inuit entrepreneurs indicated pride in their ability to use and share their
traditional Inuit knowledge, culture and legends. They also expressed satisfaction and pride in the workmanship of their products.

7.8 Inuit Cultural Resiliency and Change

As I discussed in the previous sections, the Inuit identified many ways in which they had adapted and innovated in their enterprises. Concerns were expressed about the transfer of traditional Inuit knowledge to the young people in the community as these were important survival skills. However all Elders indicated they were teaching young people the traditional skills.

Inuit in Coral Harbour were adopting new technologies. The electronic sewing machines had many stitch settings and some had automated and design capabilities. Dremmel tools, attachments and accessories were sold in the local Co-op and Northern stores. Several carvers were using these. Inuit homes had radio, televisions, and video or DVD players. Computers were in the offices, school and some homes. Many young people were wearing earphones and using iPods as they walked around the community.

7.9 Learning from Others

During the research process, the Inuit in Coral Harbour asked me several questions:

- “Who are the Sámi?”
- “Why do the Sámi herd reindeer?”
- “Why do the Sámi sell reindeer meat?”
- “What kinds of things do the Sámi carve?”
- “What other products do they make with reindeer?”
- “How do they tan the reindeer hides?”
- “What kinds of businesses had other Aboriginal people in Canada become involved in as result of their land claims?”
7.10 Conclusion

Coral Harbour had experienced continuous change during the past few decades. The community saw itself as sustainable but had been exploring alternative economic development opportunities which would create jobs and allow for entrepreneurial activity among the Inuit. The key points that were identified as a result of discussions with Coral Harbour residents are as follows:

- Food security was very important, without the subsistence harvest the local Inuit would starve. They had experienced the disappearance of the caribou before from overhunting so did not want to see this happen again.
- Inuit livelihood enterprises made clothes, dolls, jewelry, carvings, and handicrafts. Some took hunters and eco-tourists.
- A small number of Inuit enterprises had entered the formal economy by having business permits or registering with the Inuit Business Directory or the NTI Inuit Business Directory.
- Coral Harbour had explored a number of economic development possibilities to provide jobs and income. The community had chosen to build on its traditional skills with the commercial caribou harvest.
- The commercial caribou harvest was organized by the local HTO under its legislated mandate but they contracted with local operators to manage the harvest. The community had also formed a Community Development Corporation in which local Inuit community members were shareholders.
- The commercial caribou harvest was subject to carefully managed quotas set by a co-management board of Inuit and government representatives. The commercial caribou harvest had upgraded its processes and made a series of innovations to achieve Canadian Food Inspection and European Union certification.
- Enterprises in Coral Harbour faced significant barriers because of the remoteness and isolation, high input costs, lack of education and business knowledge, language, and lack of role models.
• Most Inuit enterprises were still in survival mode. They were necessity entrepreneurs as the income assisted in supporting their families. Measures of success included not being greedy, supporting the community, employing and training local people, using and building on their skills.

• The Inuit had adapted and innovated in their enterprises. They were concerned about the Elders transferring traditional Inuit knowledge to the young people as these were important survival skills. The Inuit were adopting new technologies to enhance their enterprises and to connect with the rest of the world.

• The caribou were currently in a down cycle caused by a number of factors such as climate, disease, moving over an ice bridge to the mainland, and selective harvesting.
Chapter 8 is the third of five chapters which present the exploratory descriptive cases based on the research conducted at each field site. This chapter about Inukjuak, Nunavik in Quebec is organised in the following manner: community context, Inuit sustenance economy, Inuit livelihood enterprises, Inuit formal economy, and Inuit commercial caribou harvest/processing, barriers to Inuit enterprise, Inuit measures of enterprise success, Inuit cultural resiliency and change, learning from others and conclusion.

Table 8.1 Description of Inukjuak, Nunavik interviewees

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Role and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>Inuit, male, elected community official</td>
</tr>
<tr>
<td>IB</td>
<td>Inuit, male, business development officer</td>
</tr>
<tr>
<td>IC</td>
<td>Inuit, male, carver &amp; jewelry maker</td>
</tr>
<tr>
<td>Elder IE</td>
<td>Inuit, male, master carver</td>
</tr>
<tr>
<td>Elder IG</td>
<td>Inuit, male, master carver</td>
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<tr>
<td>Elder IE</td>
<td>Elder, male, master carver</td>
</tr>
<tr>
<td>Elder IG</td>
<td>Elder, male, master carver</td>
</tr>
<tr>
<td>Elder IH</td>
<td>Elder, female, master seamstress and doll maker</td>
</tr>
<tr>
<td>IJ</td>
<td>Inuit, female, manager NGO</td>
</tr>
<tr>
<td>IK</td>
<td>Inuit, male, employee of NGO</td>
</tr>
<tr>
<td>IL</td>
<td>Inuit, male, serial entrepreneur</td>
</tr>
<tr>
<td>IM</td>
<td>Inuit, male, educator</td>
</tr>
</tbody>
</table>

8.1 **Community Context**

The village of Inukjuak in Northern Quebec is located on the eastern side of the Hudson Bay at the mouth of the Innuksuac River (latitude 58 degrees 27’ N) above the tree line. Inukjuak with 1369 people is the second largest community in Nunavik. It was formerly called Port Harrison, Inoucdjouac, Inuksuak or Kongoak. The name historically meant “in this place lived many Inuit”. Inukjuak is an important cultural centre with the Avataq Cultural Institute and the Daniel Weetaluktuk Memorial Museum and Cultural Transmission Centre.

The community Inukjuak is not connected by road to any communities in Nunavik or southern Canada. Daily access is provided by an Air Inuit flight from Montreal which costs about CAN$2776 one way. The distance from Montreal is 1470 kilometers (913 miles). Air Inuit provided passenger, cargo and emergency medical services. The small plane stops in several other northern communities on
the route. Both the runway and the Inukjuak airport are small. The community is accessible by ship for approximately six weeks each year when the ice is out of the harbour. Like the Inuit in Rankin Inlet and Coral Harbour, the Inuit here use the annual sea lift to order resupply items from the south. In summer 2005, the first small cruise ship with 66 passengers stopped at Inukjuak. The community had sold crafts and offered cultural activities to the tourists.

Its harsh climate allows for a limited growing season. The landscape is rocky, generally treeless and there is lots of permafrost.

Inuit have always lived in Inukjuak. The first trading post was built in the 1909 although the Inuit in the area had travelled to other trading posts since about 1750. Today, Inukjuak has a hospital, one school which offers preschool, elementary and secondary levels. The children learn Inuktitut up to Grade 3, and then their families choose whether the children should learn English or French. Inuktitut is predominantly spoken at home and in the workplace. Inukjuak has an Aboriginal head start program and two private daycares. Community services include a municipal building, police station, library, church, community centre, indoor hockey rink, a youth centre, fire station, and radio station. The Northern Store and Inukjuak Cooperative sell retail goods. The cooperative also owns and operates the Inukjuak Hotel. There are few businesses. There are no restaurants, coffee shops, taxis, buses, or car rental agencies.

The community has about 260 housing units. Most of the community live in government provided housing which is heavily subsidised and costs about CAN$250 per month (less if you were an Elder). Housing is in very short supply with more than 150 people on the waiting list.

8.2 Inuit Traditional or Sustenance Economy

Hunting versus Herding

Inuit in Inukjuak still depended upon the sustenance economy. The community had few jobs and many people were on welfare. IG commented, “I go hunting because we need some food.” He added, “I bought some frozen meat from the
store. Even though I was full that never satisfied my flesh. When you have fresh
country food, you have more energy.” Inuit considered hunting and fishing to
be the same. According to IA, “For one you go through the water but you are
still hunting.”

IA: In every statistic […], Inukjuak is always behind in people working.
A lot more people are on welfare because of the lack of opportunities
 […]. Majority of them [the community residents] go out hunting, do
sewing and receive welfare […].

Food Sharing

Inuit in Inukjuak still practiced food sharing and viewed selling caribou over the
radio as wrong. The Hunters and Trappers Support Program purchased animals
for the community freezer from the hunters.

IA: We have a Hunters and Trappers Support program here. The
program offers the hunters an opportunity to bring the meat into the
community freezer then it is brought to the elders and the other
members. It is administered through the municipality […]. There is not
[a] problem with [selling the caribou to] the hunter support program.
But to sell to outside restaurants and things, they have to go through the
provincial and federal processing and food inspections […]. Only people
who get money through the hunters program are those who get the
animal.

8.3 Livelihood Enterprise

Carvers

ID: I want you to write down how the Inuit people still used their hands
to make a living in this community.

Inukjuak was one of the key communities still producing Inuit art carvings.
These carvings had been sold internationally since the 1940s. Until recently,
ninety percent of Inuit carvings sold abroad were from Inukjuak.

IA: The majority of soap stone sculptures are from here because of the
nice green soapstone. Carving is still one of the bigger sources of
money coming into the families and other communities here.
IG said, “Today I make carvings for a living because I have never worked […]. Right now they pay me a little more […]. I have a lot of family who need my support […]. I help them by making a carving.”

Carvers described when they first sold their carvings at the Hudson Bay Trading Post. ID sold his first small carving in 1955 in exchange for candy.

IE: When I was in my early 20’s that was the first time I sold my carving to the company [the Hudson Bay Trading Post]. There was only one company […]. We used to get a very small amount of the product we needed. At that time, it was tea and sugar which were very low cost. Even CAN$5.00 could buy all kinds of things that we wanted […]. Because I continued to make carvings finally I was able to get some guns and necessary tools. As the price kept getting higher [for the carvings], I was able to buy some ski-doos.

The carvers mentioned the community’s isolation had been overcome by the exposure Inuit carvings received through the Hudson Bay Trading Post, the RCMP and the C.D. Howe Arctic Patrol Ship which went across the regions each summer. It carried supplies to Northern settlements; did environmental and marine research; provided medical and dental treatment; and transported Inuit sick with tuberculosis for treatment in southern Canada.

After the local Inukjuak Cooperative started in 1962, a Carvers Association was formed. All the carvers reported selling their carvings there. IG added, “It has been a long time since the Northern Store accepted any carvings.” Only the Co-op took carvings now and the carvers had a limited source of funds there. Although the Co-op was open daily, the carving shop was not open every day. IE indicated, “We just can’t make the amount of carvings like we want […] because there is not enough money available in the Co-op. They are not just giving the carvings away. It is not easy.” I looked at the inventory in the Co-Op carving shop. Many of the carvings depicted marine life, only one showed caribou. A few carvings had incorporated caribou skin or antler.

The carvers were listed with the Inuit Art Foundation (IAF). IG commented, “The people from Montreal asked me to make a certain carving. I make big carving and also smaller pieces.” He showed me a book the IAF had produced
with pictures of several local carvers and their works. Their carvings were displayed in Montreal, Toronto, Ottawa and internationally.

Two young Inuit who were really good carvers had gone to shows in different countries. A carver added, “When they sell it through here they don’t earn as much as selling to other areas.” IG indicated that people from overseas had invited him to visit and show his work but he lacked the necessary passport and paperwork. Instead, he had gone to Montreal and Toronto. The IAF was promoting some of the carvers’ works on the Internet.

_ID_: In 2006, the IAF showed my carvings using the internet. Some people from other countries and people who have got to know me when they visit Inukjuak sometimes buy carvings from me.

The carvers reported using caribou antler and bone to add detail or to support their stone carvings. None reported completing a carving entirely from bone or antler.

_ID_: By experience, you know what area or what part of that soapstone can break off easily […] . That is why [you] use the antlers for the
I wish soapstone could be like soap. With soap you can make anything. Soapstone is pretty hard to shape.

IG said, “Since the 1970s, I have used both caribou antler and walrus tusk to make the teeth and the eyes because they highly value those carvings.” ID commented, “When making the walrus, I use the antlers because it makes the walrus more real. When I make the image of man, I use the antlers to make a more vivid picture.” On the other hand, IE said, “I have been carving for a long time. It is very difficult what kind of image you are going to carve. It is pretty hard and challenging. So I don’t use a lot of antlers.”

ID: If you want to become a very good carver, it is difficult to make the image of what you want to make. Soapstone is not like clothing as it breaks and does not drape.

The carvers said they were not taught how to carve but learned by watching older family members and others in the community. ID added, “Nobody taught me and no one offered to teach me how to make a carving. I started to carve by watching others.” Elder IE started carving when he was 21, “I taught myself.” Today, Makivik Corporation annually holds lessons in carving, printmaking and doll making (IB).

The carvers only used three basic tools: the axe, knife and metal file. ID said, “At first, there were not enough tools. I used the metal from the axe to make a file […]. The tools started to come in the 1960s.” When IG started to carve, he borrowed tools from his family. IG added, “When I used to sell my carvings and I got those little payments, I started to get some tools.” According to IE, “I have never used dremmel or electric tools. I don’t know where to get them. They are too expensive, I use my own hands.” The carvers were proud that Inukjuak was known today for its use of the traditional tools to carve with instead of dremmels.

Inuit today can apply for grants to assist with buying tools. ID explained, “We get help from our community and also the people from Ottawa. They give us the tools and they help us.” However IE commented, “No companies offer to buy tools for us. Those tools are very expensive. We buy them ourselves by making carvings.”
All the carvers reported bringing Inuit culture into their carvings and small businesses. IE commented, “I am extremely proud of what soapstone carving represents. It represents our culture, who we are and how we have struggled to keep our family fed and to make a living.”

The carvers told Inuit stories or legends with their carvings (see Figure 8.1).

*ID:* Some carvings I make have a story in it that I have heard from my Elders about what our ancestors used to do. I started writing something on paper to explain what the carving means for the people who buy my carvings.

The carvers indicated that their Elders had not given suggestions or advice. IC commented, “No one came to us from the Elders.”

It took a long time to become known as a carver. But the sense of accomplishment also comes from completing the carving. IG commented, “People who have been working for about 10 years get recognition. I really don’t mind if I don’t get any. A carver doesn’t need any recognition because at the end you can see the finished carving and it feels good. I think what helped me the most was for someone to recognise me.”

It was very important for the carvers to have a nearby source of pure soapstone with a nice appearance and very good quality. Unfortunately, this was difficult to find. IG wanted people to understand, “This is not easy for Inukjuak, and the soapstone is very deep underground.” IE said, “Getting a source of pure soapstone was my biggest obstacle […] The soapstone often has a piece of rock. This makes it pretty hard. You need pure soapstone.” The soapstone near Inukjuak was not as good quality and ID indicated the best quality soapstone was about 50 miles away. In the spring, a boat was provided so the carvers could bring a large amount of soapstone down to Inukjuak.

Inuit carvers were innovating and adapting. Before they used to make big carvings, but they were encouraged to make small carvings as these were easier to ship. However, ID indicated when he started his carvings were small, now they were bigger. Materials and carving techniques were changing.
IB: The old carvings used basically one material, soapstone. They were the whole black carving without any really unique pieces in it. Now, other materials such as ivory and precious metals and stones may be blended into the carvings. That is being encouraged by the south as well. The younger generation is responding by including new materials.

ID explained how his carvings had changed. “I look at my first carvings as baby steps. They were not nice [...]. Today when I am finished making the carving, I say to myself, ‘Wow what an achievement I have made.’” ID also tried to carve many different images, “I mostly make the man or the animals though I don’t carve them in the same position but different movements [...]. There is a story in what I make. It is not just a man; it is a man turning into something else.”

IG discussed how his work had changed. “When I was small and started to carve, it was not good so it did not sell. I started to improve and the carvings got better. They bought my carvings and I got paid. That is how I grew up by practicing and doing.”

The carvers learned with just three traditional tools - a knife, axe and sandpaper. Today, carvers were using more and different tools. According to IB, “A lot more people are going towards more advanced tools like dremmels. About ten years ago, they really started to use dremmel tools here.” The Elder carvers commented that they still used the traditional tools and not the machines. ID indicated, “We have many tools now but I use mostly six kinds of hand tools. In addition to the axe, knife and metal file; I use a round file, a flat one, and a triangular one. Some are small and some are bigger.” ID added, “I don’t use the electric tools because I think they are destroying the carving […] and] what shape it would be.” IG also commented, “Other people who carve are using the electric tools but I am using my hands. I never use the machines. I have many more hand tools today and a lot more files.”

Inukjuak’s Co-op previously owned a print shop which used plates made by Inuit carvers. IE explained, “We used to have a building [in which] you would make art forms like pictures [print making with ink]. That is what I used to do. I
was the manager.” IE shared copies of his pictures dated 1974 which a family member had downloaded from the internet.

IE: When my sister’s husband died, there were not enough supporters for their children. There was not enough money in the art company. I started to think it would be better for me if I started to carve again so I left the art company […] I thought the other people working there would be able to keep it going but they never continued. The art company closed.

**Jewellery Making**

Makivik Corporation had offered training classes in jewellery making but had stopped because they were too expensive.

IC was listed in the Inuit Nunavik Regional and Private Business Directory compiled by the Kativik Regional Government. He carved and made art, prints, and jewellery. In 2000, when IC was 26, he started making and selling jewellery. He used metals, ivory and caribou antler for the jewellery. In 2004, he and four others began developing a business plan for a jewellery studio. IC went with the business development officer to Ottawa and attended an Inuit Art Foundation workshop on starting a small business. IC added, “They taught him how to keep the books, how to keep the business going, and how to know he was making some money.” IC commented, “People from the federal government came here and taught us what percentage and taxes they wanted.” IC sold his jewellery to Inuit and to non-Inuit and customer demand was building. According to IC, “People in the south are beginning to hear about our project. People come in from the south and ask if there are any jewellery makers. We are asking for their names so we can satisfy their requests. We have the equipment now.”

IC also mentioned, “We wanted to start the jewellery business because we wanted our Inuit culture to continue for many generations. We do not want to lose our Inuit culture, our art, our life.”

IC found filling out the forms to get the money for the tools and building was difficult. IC commented, “We did not much information about why we wanted to do this project. We tried repeatedly. Finally we got approved. Sometimes we
wished the companies could understand why we wanted to get this project going.” Katherine Soukup (2009) reported in the newspaper that the Inukjuak Jewellery Project had been started in a building loaned on a long-term basis by Makivik Corporation. The project had received funding from the Kativik Regional Government’s Diversification Fund and Employment and Training program and the Kativik Local Development Socio-Economic Fund.

**Seamstress and Doll Maker**

IH was a master seamstress and doll maker. She was young when she first started sewing for her family. IH had helped her mother make the *amauti*. At 15 years old, she sold her first products to the Northern Company (then the Hudson Bay).

IH: We started to make dolls about the 1950s. This federal person came to our community to teach us […]. I made them from my own tent and igloo. Later I made them at home. There was no building for the ladies to sew in. Initially the dolls were made from little pieces of clothing, like flannel […]. The face was made from socks. I never made faces with the caribou skins […]. There were no soapstone heads for the dolls then. When I started to make a soapstone face for the doll, Charlie used to help me. He carved the faces. [Her husband, Charlie Inukpuk, was an internationally recognised carver]. But now, I make the faces.

IH’s Inuit dolls were made primarily from seal skin, jeans or other relevant cloth, or some caribou skin. IH commented, “I don’t really use much caribou skin.” However, several of her Inuit dolls were wearing clothing made from caribou skin (see Figure 8.2). One of IH’s earlier dolls which I saw at the Co-op carving shop was much larger. IH’s current dolls stand about 23 cm. high. She had sold them through the Co-op and the Hudson Bay Company until they no longer wanted them. Now IH makes them in response to orders.

IH received help from IAF’s Inuit Artists Shop to promote her work. IH said, “That is how people started to get to know me.” IH showed her dolls in Ottawa. The people who saw her show or watched the video then phoned her with orders. IH’s Inuit dolls were shown nationally and internationally. She still found lack of recognition hampered her doll sales and the money she could be making.
IH used the Inuit collector dolls (Inuujaj) to tell stories which “represent our Inuit culture, our way of life”. As IH showed me a doll, she explained,

IH: This is the story about a young lady. Her name is ‘Atmua’. The husband and wife started to go around the world. Her brother caught a ptarmigan for the very first time. I don’t know what she caught. Their parents left them alone so they started to walk around the world. When one of the neighbours saw the strangers come in, they asked the children, “Who are your parents?” She responded by saying, “We are the elders of Atumuk.” It was actually her mother. Because their parents used to walk, they couldn’t get old.

A family of IH’s dolls were on display at the Avataq Cultural Centre. Representing the Atungak tale, these consisted of Atungak, his wife, son, daughter, a sled and four strings of beads. Their clothes were made of skin, fur and nails from caribou; fur from seal, muskrat and arctic hare; and cow skin (Avataq, nd.).

Experience had improved the quality of IH’s dolls. Now she knew which materials would make the doll more valuable. As she was getting older, IH was having difficulty making her dolls. “I have trouble seeing so my children and grandchildren thread my needles [...]. My hands get tired and sore.”

IH offered to sell a pair of white furry mitts made from husky dog skins and trimmed with rabbit and seal skins. She had sewn some for her husband and his brother.

IH has transferred her knowledge to the next generation. IH said, “I taught many young people how to make dolls. When I was teaching them, I had to do every single thing. It was really tiresome.”

A local Inuk woman showed me boots she had made from caribou and seal skin for a friend (see Figure 8.3). She made other clothing products from caribou when it was available. I visited the Inukjuak Sewing Centre which was a project of Makivik Corporation. The women were adding furs to the jackets for the Nunavik Team to the Arctic winter games.
Figure 8.2 Inuit doll made by IH with caribou boots and seal clothing and trim (photo by Aldene Meis Mason)

Figure 8.3. Caribou boots with seal trim and bottoms (photo by Aldene Meis Mason)
Home-Based Meat Processor

Inukjuak had one small business that made and sold *mikku* (dried caribou meat). According to IB, a local Inuk did the processing in his home. A small zip lock plastic bag cost $CAN 5.00. IB indicated, “Besides this, there hasn’t been any other business other than Ipushin.”

Commercial Hunting, Tourism and Eco-Tourism

A few outfitters offered commercial hunting very sporadically (IB). An Inuk used his dog team to take people out on excursions. But this didn’t happen every year. Tourism in Inukjuak had started out slowly. Two years previously, a small cruise ship had visited the community twice. But it did not return the following year. IB indicated the community had begun talking about developing and promoting these kinds of opportunities.

8.4 Formal Economy

According to IA, business was not in their culture and the village lacked economic development. IA commented, “We try to get economic development plans. For one reason or another in a small community like this, it is hard to get on its own feet. We try again to get new people. It is not in our culture. We have to learn from scratch in that way we are behind.”


8.5 Inuit Commercial Caribou Harvesting/Processing

IL, an Inuit entrepreneur, had been an executive with Makivik Corporation and its subsidiaries. He had started Caripoo Trading Inc, a registered Inuit enterprise in the 1980s. The company collected shed antler or hard horns that were still fresh, then cut and dried them for sale. Their customers were located in Canada and internationally. IL indicated there were no problems with gathering the antler. Initially there were several competitors in Nunavik. However, the season
was short lasting about a month from mid-June. During that time, the price was very good but after it dropped quickly.

IL indicated that there was absolutely no resistance to selling caribou products from Inuit in Nunavik. IL said, “This could provide needed extra cash for the hunters. About 80 percent of the people go out and live on subsistence hunting, fishing and gathering.” The only resistance had come further south from the Cree [a First Nation people] who had a sacred connection to the land and with the wild caribou herds.

*IL:* When the antler business started in Nunavik, there were a lot of people involved. A lot were competing on prices […] None survived except my company. I bought a lot of their stock even before it left their containers in Nunavik. A huge quantity in Montreal was waiting to be sold that did not have a buyer. My company survived with a Korean partner in Los Angeles who had been doing this business for quite a long time with his father in Seoul Korea who was in the same type of business. He was selling animal products and by products for traditional medicine. The buyer was more interested in the velvet antlers but I couldn’t provide that because I didn’t have any slaughtering or herding operations.

IL commented that the antlers were outside the regulatory framework except when it came to international shipping or trading rules regarding imports or exports. There were no rules about gathering shed horns.

As IL did not have a herding or slaughtering operation with a huge number of caribou contained, he was not able to provide the antlers. In the early 1990s, IL looked into a commercial caribou harvesting and processing operation but, “This was a huge undertaking”. After noting the demand for fresh antler, IL formed Ipushin Trading Company (La Société de Commerce Intercontinental Ipushin Itee) located near Inukjuak in 1996. “I had Korean partners. Later on I was able to involve Makivik Corporation and some funding from the regional government.”

IL successfully connected Ipushin with an American company which had agreed to buy all of its products and distribute them in the United States and Europe. They had targeted the high end of meat market. Ipushin had an initial quota of
5000 caribou. IL mentioned those were difficult times to access capital. The Ipushin project cost about CAN$1.7 million.

*IL:* It was a private operation. It had my money, Korean money and loans. At one point the Bank of Montreal was involved. The project had some equipment failure the first winter. It needed adjustment for the following season’s operation. A Government of Canada (n.d.) website showed the company had received a CAN$23,150 grant. We needed more funding. I was unable to interest the promoters or the finance companies and the partners that I was able to round up from the beginning […] The region basically decided not to support this private operation.

Prior to starting the commercial caribou slaughter and meat processing business, IL talked with and visited Sámi reindeer herders in Sweden, Norway and Finland to see their herding and corralling operations. IL indicated, “The Sámi had been doing this for about four or five hundred years and the people lived quite well on the industry. The Sámi carefully managed the numbers and never had to go outside their countries.” IL first went with a group sponsored by the government to visit reindeer slaughter facilities in Europe for two weeks. He returned at his own cost a few months later to explore the idea further. IL added, “At that time, no one else was doing this in Canada. They were not even slaughtering in Alaska.”

IL and his partner built the slaughter house and processing facility from scratch to meet the strict federal regulations so the products could be exported across provincial and international borders (see Figure 8.4). IL commented, “All the wood and equipment had to be imported into Nunavik. This was a large expense. The only trees you see in Inukjuak were the ones I put in for the corrals and fences.” To put this in context, a sheet of half inch 4X8 plywood costing CAN$22.50 in Ottawa, cost CAN$140 by the time it reached Inukjuak (Government of Canada, 2005).

Ipushin’s 27 Inuit employees had no previous related experience or training in herding, corralling or processing. IL hired a butcher to teach the Inuit employees meat processing and a Sámi from Sweden to teach how to herd and slaughter the caribou. The Sámi herder was experienced with semi-domesticated reindeer, but not with wild caribou. From October 1995 to March 1996 the Inuit employees
were taught herding and meat processing. IL commented, “We did the training with an initial successful herding of about 3000 head of caribou. The company self-funded the training program as grants and hiring bonuses were not available at that time.” I compared this with my recent experience where the federal and provincial governments had recently contributed 30 percent of the training costs, employee wages, and learning curve productivity losses to assist with the start ups of our green field agriculture production and processing facilities in three western Canadian provinces.

The slaughtering was performed according to CFIA standards. IL initially built corrals to meet the federal regulations which required holding the caribou although this was not a traditional Inuit hunting practice. IL reflected, “The operation was very complicated and if we had worked with the government more closely and had more time, we would have been able to make perfect adaptations or modifications acceptable to the government.” He added that even the Swedish Sámi thought the operation was too expensive and too complicated.

IL: I also would have paid closer attention to how the slaughterhouse was built. It was built with two trailers. The first 40 foot trailer was prefabricated by a company in Montreal and a cooler unit extension was another 40 foot trailer. But we weren’t able to operate that first year because it did not meet Agricultural Canada standards. We had to make an extension on the side for the inspectors’ offices, the workers’ changing units, and proper washrooms. We should have worked with Agriculture Canada from the beginning and not relied so much on the supplier who said he knew what was needed.

IL provided another example of how they had incurred unnecessary start-up expenses. Because caribou were larger than reindeer, IL thought they would need restraining before slaughtering. Ipushin adapted a unit which had been designed for restraining goats at a huge expense. The unit cost CAN$45,000 with an additional CAN$6,000 to CAN$7,000 for transportation. Because the unit used high voltage power, additional power lines were installed and running it was very expensive. After two or three caribou went through the unit, Ipushin found it was completely useless.

Operating costs were much higher than in Scandinavia. There was a brief opportunity when the herd migrated to Inukjuak (a distance of about 100 miles).
The people in the various communities would watch and let IL know when the caribou were near. Ipushin would quickly bring in helicopters from Sept Iles (Seven Islands).

**IL:** The cost in herding with the air support was a lot of money. There was no way of knowing where the main concentration of the herd was except limited satellite information and word of mouth from community to community. Unlike the herders in Scandinavia where the whole country and more than one country are working together making a living off their entire herds, the people in Nunavik had never attempted that kind of operation.

I asked an Inuk in Inukjuak if the people were mostly sealers why the caribou plant had been built in Inukjuak. They had asked a similar question as this was not Inuit culture. Ipushin was in business for less than two years. At the time of its closure, Ipushin had 27 Native employees, a butcher-instructor, and two consultants from the south who had been involved in financing these operations as well as running a slaughter house processing plant operation.
It was very, very unfortunate. We were successful in connecting with a company in New York City who would have been buying everything that we produced. That wasn’t convincing enough for the promoters to continue funding the operation. They wouldn’t give me the CAN$600,000 I needed to make adjustments and continue the project. I was unable to repay my bank loan and the funding agencies in the region. I closed the shop and locked it up. The slaughter house is still there sitting in the same spot and so is the processing plant.

IB explained that it was very costly to obtain and maintain the Canadian Food Inspection certification. IB said, “The Quebec government had not responded in the company’s favour to sell [meat] outside the province.” Selling internationally had even more regulations.

Several Inuit told me that the Ipushin experience was a role model of progress for the community. It had connected them to the outside world. They began to express an interest in exploring economic development opportunities. This reinforced why it is important to not refer to a business that discontinues as a failure.

IB: Ipushin was an inspiration to the community. It had a real community impact and got the community going. It exposed Inukjuak to the world […]. This was one of the main times where Inuit started looking at their natural resources to generate self employment income besides the usual carvings […]. The Ipushin plant spiked interest in economic development.

8.6 Barriers to Inuit Enterprise

Barriers to Inuit enterprise in Inukjuak included: a lack of education and skills training; a lack of business knowledge and skills; a lack of start-up capital; a lack of infrastructure and suitable available buildings; a lack of housing and in particular a lack of home ownership; regulations; lack of access to government services, particularly those of the Quebec and Canadian governments; small community size; remoteness; and high costs for energy, fuel, transportation and supplies.

Lack of Formal Education

A lot of ongoing programs and projects were available to help Inuit interested in small business. The Inuit had good ideas. However, lack of high school and
post-secondary education, lack of skills training, lack of business management basics, and English as a second language presented significant barriers.

IA: It takes individual people to push themselves. Not a whole lot of our children finish high school. Those who drop out don't have the knowledge to get higher college or university. They have to take many steps to be eligible so a lot give up. A few smart ones take on this challenge to go through successfully. That is only a handful.

According to IB just getting the basics of business management was a challenge for small businesses. The business development officers are very stretched to the limit to help and teach small business owners.

IB: A lot of people may have good business ideas but they don’t have the proper background to fulfill their operational management goals. Some tend to have no high school education. Community members with English as a second language and a grade eight or nine education had difficulty completing government forms.

To increase business success, Inukjuak was looking at creating community enterprises rather than individual businesses. It was also exploring building Nunavik’s first business incubator which would have eight spaces. These would be flexible, change in size and consider the growing needs of the businesses. The small businesses would have short term leases. The Business Development Officer would provide bookkeeping services and teach them how to care for their own books.

IB: We believe this is the answer to basic business training because the people applying for businesses have a general business idea but don’t have the background to properly manage it. We are basically […] doing the whole business plan, bookkeeping and processing. When trying to take care of four communities and taking care of all their books, it is not realistic […].

Limited Access to Financial Resources

Getting funds to start enterprises was a barrier. According to IA, “Programs are available from the Kativik Region. It takes interested people to do that. Only a few are taking advantage of this.” The community had two Business Development Officers employed by the Kativik Regional Government. IB believed their salaries came from Indian and Northern Affairs Canada. The
officers supported people wishing to start businesses and helped them get funds. They tried to tap into as many organisations as possible to realise a project.

**IB:** We look at our own grants, and for major projects, at Aboriginal Business Canada. For our own grants, Inuit ages 35 and over first must put in 20 percent contribution, then there is a combination of loans and grants. The grants tend to vary from 20 to 40 percent and the loans 20 to 40 percent depending on the project.

The number and size of grants available from the Kativik Regional Government for business development, employment, and training increased if more jobs were being created. All the funding was basically from the Quebec government.

For example, IC indicated they had worked since 2000 to start the jewellery business.

**IC:** Getting funding and completing the paperwork requesting the funding were obstacles […]. You have to really work to get the funding and to keep the business growing. First, we were thinking of people who did not have jobs and were on welfare. It was to help them learn, develop and become more skilled. After that, we started thinking about making the business gradually grow.

**Lack of Infrastructure**

Inukjuak also lacked infrastructure, particularly premises for the enterprises. IA commented, “There is a lack of buildings. Most of the buildings are owned by others. They have to do a lot of renovation to old buildings or build a new building which is a hurdle in itself. Support programs are available for such ventures.” The jewellery making business had been looking for space for three years (IB).

Inukjuak’s lack of housing blocked access to skilled labour as former community members who went to southern Canada for post-secondary training could not return. IA commented, “We need to get them space up here so we can use them and help the community […]. We want to hire people for new jobs who are educated but they are stuck down south because of the lack of housing here.”
Most of the housing was public or social housing. According to IB, the Kavivik Regional Housing Bureau had only one requirement for people using the Affordable Housing Program who wanted to operate a business. They had to have separate entrances for the business and the home.

IB saw many problems with people purchasing their own homes in Inukjuak and especially if they wanted to use their home as a base for their business. The KMHB provided grants of up to 70 percent for anyone who wanted to move into their own home. However, no company provided housing maintenance services and fuel prices were very high. One could pay up to CAN$1000 per month on the heating fuel not including the maintenance of the utilities and home. If maintenance services were available, these cost CAN$50 to $75 per hour. If no one local was available to do maintenance and repairs, one had to pay the transportation and fly them in. IB added, “Here we are lucky to have the training courses at the adult learning centre for carpenters, electricians, interior plumbing, and heating systems.”

High Operating Costs

Local enterprises kept closing. IA was not sure of the reasons. IB commented, “It is very hard to succeed because it is such a small market in each community.” Using restaurants as an example, IA indicated there was a need. Several people had tried to run them, but they hadn’t succeeded […]. Maybe it was the lack of clients or their rent was too high.”

To help reduce the operating costs, the municipal council supported local business start-ups for the first three years by not charging them municipal service taxes. Because energy costs were so high, Inukjuak was heavily involved in Green Energy projects such as the Run of the River Power Generation. They were exploring using the local municipal household dump for a micro auto gasification project to create heating fuel.

Regulatory Environment and Government Support

Regulations could also be a barrier to business development. For example, a letter posted in the Inukjuak Municipal Office said that caribou products from a
subsistence harvest could not be sold to a non-Aboriginal person. However, IB indicated an Inuk wishing to sell part of a caribou for use in carving or other things did not require a permit and the artist did need a permit to sell his/her work either […]. They must have tags and permits to sell outside Quebec and Nunavik […]. To go abroad, there are a lot of regulations.”

The lack of local Quebec and Canada government offices in Inukjuak had created difficulties. IB explained that some business questions were referred to the offices in Quebec City and Ottawa. However their responses could take one or two weeks, were very general, and could be inconsistent.

*IL*: I was completely convinced we could do the same kind of herding, slaughtering and processing operation here that Sámi were doing in Scandinavia. I am still convinced today that it can be done. But, it needs the support of the whole region as well as the provincial government if we were ever to succeed in any operation like this.

**Isolation**

For many years, Inukjuak had been quite isolated. The community is now reaching out for more information. They are participating in conferences such as the Canadian Business Incubators Association, the Renewable Energies Conference, and the first Northern Lights Trade Show.

*IB*: That is when we realised all the other Inuit regions have their own Chamber of Commerce: Labrador, Nunavut, Baffin. […]. We are trying to start a Chamber of Commerce. We are not only isolated from the south, we are isolated from our Inuit cousins and their economic development.

8.7 **Inuit Measures of Enterprise Success**

For Inukjuak, a key measure of Inuit enterprise success was survival. According to IA, “There are not a whole lot of businesses being successful for one reason or another […]. It is very expensive to run a business here.” IB added, “Breaking-even is a very good measure of success for a lot of businesses.” Job creation was another measure of success. IB commented, “Projects which create a lot of jobs get more funding.”
Several Inuit enterprise carvers mentioned their measures of success were earning sufficient to support the family and pay debts.

IE: There are so many materials needed for our family like a bed or anything that is valuable. There is so much debt around and we have to take care of it. I am extremely proud that we started to carve.

8.8 Inuit Cultural Resilience and Change

Inuit in Inukjuak and in the region are strongly tied to the traditional culture. The outside culture only came very recently in the 1950s.

IB: They are still very attached to the traditional hunting the Inuit like to do. The outside culture only came in very recently in the 1950s. Their fathers and grandfathers only speak Inuktitut. They still want to hunt and carve. That is still part of the younger generation’s daily lives. They prefer not to work. They prefer not to apply for a business. The culture is very much alive in this community and in this region. I came to realise and respect this very much. It is this balance. Some people are advanced in their education; they want to pursue a job and a business. The artists are more oriented towards our culture.

Young men who stayed in school to get more education were losing their traditional hunting skills. IB commented, “They are sacrificing their own traditional skills. I think that is being overlooked.” As one of Inukjuak’s socio-economic plans, the OONAK Association was formed two years previously to support the community’s young men. Its board consisted of the Elders, the Cultural Training Consultant and the Business Development Officer. The Elders were teaching traditional skills such as igloo making and hunting.

Carvers were also passing their skills on to interested younger people. ID elaborated, “I taught myself and also now the younger generation even though nobody ever taught me how to make a carving. It has helped a lot for the younger people to see my carving when they go to the carving shop at the Co-op store.” IG also commented, “I have two young kids and others who always watch me. When I carve, I can see some by their faces they are really interested in the carving and want to learn.”
A poster in the entrance to the municipal administration building showed an Inuit Elder remembering her mother sewing with caribou thread and caribou skins. She was saying, “Children were using their time to watch television rather than learning skills.” IB commented, “The internet just came here about five years ago. This is not the biggest community in Nunavik but it is right up there in Internet usage. There are more internet modems than phones in the houses.”

The Inuit culture had a different approach to teaching and learning. They believe in teaching themselves by observing, seeing, trying and practicing.

IE: I don’t teach the younger generation. I believe that they have their own creative thoughts. So I believe every person can start to practice, keep at it and become carvers. They can come, watch and learn from me. I get a lot of observers from the younger generations.

IE also mentioned, “Mostly white people who come to me, they take a picture and watch me making a carving.” IE asked me, “Is that the only thing that you learn because someone taught you back in school. You people from the south, did someone always have to teach you?”

8.9 Learning from Others

Some of the oldest rocks in the world had recently been found near Inukjuak. The municipal administrator realised that scientists would come to study these rocks. Inukjuak was interested in knowing how to work effectively with these researchers.

The Inuit interviewee wanted people to know about the forced involuntary relocation of nineteen Inuit families from Inukjuak to Resolute Bay and Grise Bay by the Canadian Government in 1953. This was called the “Assisted Eskimo Projects”. Canada to assert its sovereignty in the high Arctic resettled the families from Inukjuak to Resolute Bay on Cornwallis Island and Grise Fiord on Ellsmere Island. A $10 million trust fund was established in 1996 for the High Arctic families who were relocated. On August 18, 2010, the Canadian government formally apologised to these Inuit. The first year in Resolute was difficult due to “a lack of supplies and inadequate equipment” (Government of Canada, 1994, p. 494). Problems identified with the new locations included: substandard housing, a
boat without a propeller, insufficient numbers of caribou skins for clothing; inadequate food and ammunition supplies; much lower temperatures; very different game and terrain conditions; and darkness which lasted for three months. In addition to these hardships, the Inuit lost their kinships, friendships, culture and languages.

8.10 Conclusion

Chapter 8 is the third of five chapters which present the descriptive exploratory cases for each research sites. Inukjuak was isolated, quite traditional, and had very limited economic development which focused mostly on Inuit carvings. To summarise:

- The sustenance economy remains very important as jobs are scarce and the cost of food and other items is high. Inuit depend on a wide variety of species for their diet including caribou. Caribou migration patterns had changed and they did not pass close to the community. Food sharing is widely practiced and selling food except for fund raising is not acceptable.
- Livelihood enterprises include carvers, jewellery makers, doll makers and seamstresses. Inuit carving is well established and has a long history. Carvers are proud of their ability to earn their livelihoods with their hands. They sold their art pieces to the local cooperative’s carving shop and to the infrequent visitors to the community. Carvers take pride in using traditional tools. Access to high quality carving stone is a concern. Jewellery making is in its early stages. Inuit women sew for their families and also sell or trade their home-made clothing. The government started Inuit doll making in the 1950s. Doll makers focus on museum and collector dolls. They used a variety of local materials. Doll making classes were recently been offered in the community to transfer the knowledge to the younger generation. Few outfitters offer commercial hunting.
- Inukjuak has a very limited formal economy. Businesses start but frequently discontinue.
A serial entrepreneur has operated two formal businesses connected with caribou. Company I1 had successfully specialised in collecting and selling shed antlers internationally. Company I2 was formed in the mid-1990s as a private enterprise to gather and slaughter using Sámi techniques and then to process and package the caribou. Within two years this operation ran into financial difficulty due to difficulty meeting initial CFIA requirements and high start-up and operating costs. Although I2 had to discontinue, it served as an important demonstration to Inukjuak that the community could participate in the global economy.

The community experienced many barriers to Inuit enterprise including lack of desire to achieve, lack of education, training and business knowledge, English as a second language, difficulty obtaining funding, a lack of housing and premises suitable for enterprises, lack of and costs of infrastructure, remoteness, high costs of living and limited role models of successful entrepreneurs.

Inukjuak was beginning to reach out to Inuit and other communities across Canada to learn from their experiences in entrepreneurship and economic development.
Chapter 9 is the fourth of five chapters which report the exploratory, descriptive cases written about each research site. This chapter about Happy Valley-Goose Bay and North West River in Labrador is organised in the following manner: community context, Inuit sustenance economy, Inuit livelihood enterprises, Inuit formal economy, and Inuit commercial caribou harvest/processing, barriers to Inuit enterprise, Inuit measures of enterprise success, Inuit cultural resiliency and change, learning from others and conclusion.

Table 9.1 Description of Happy Valley-Goose Bay and North West River interviewees

<table>
<thead>
<tr>
<th>HA: Inuit, male, entrepreneur, meat processor</th>
<th>HB: Inuit, male, entrepreneur, meat processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC: Inuit, female, NGO manager, consultant</td>
<td>HD: Non-Inuit, female, manager, NGO</td>
</tr>
<tr>
<td>HE: Non-Inuit, male, manager of NGO</td>
<td>HF: Inuit, male, Inuit government administrator &amp; entrepreneur</td>
</tr>
<tr>
<td>HG: Inuit, male, entrepreneur</td>
<td>HH: Inuit, male, elected Inuit government</td>
</tr>
<tr>
<td>HI: Inuit, female, economic development officer with NGO</td>
<td>HJ: non-Inuit, female, academic</td>
</tr>
<tr>
<td>HK: Inuit, male, employee of government agency</td>
<td>HL: Inuit, male, serial entrepreneur</td>
</tr>
<tr>
<td>HM: Inuit, male, employee of government agency</td>
<td>HN: Inuit, female, employee</td>
</tr>
<tr>
<td>HO: Inuit, male, NGO</td>
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9.1 Community Context

The research visit to Happy Valley-Goose Bay and North West River took place in October 2007. Happy Valley-Goose Bay is the largest community in Labrador. It was formed when the communities amalgamated in 1975. Goose Bay was established in the 1940s when the bases for the Royal Canadian Air Force and United States Air Force were built. Although the bases had closed, the facilities remain. Happy Valley-Goose Bay is an important international military flight training centre.
The community’s population was 7572 in 2006. Of the 2729 people who identified as Aboriginal, 1280 were Inuit and 715 were of Inuit ancestry (Statistics Canada 2010). Only 3.5% of the Aboriginal identity population knew any Aboriginal language. More than 95% of people spoke primarily English (with a small number of French) in their homes.

The modern community is located on the Churchill River in central Labrador at the end of Lake Melville and connects directly to the Atlantic Ocean. The area is surrounded with forest, lakes and nearby small mountains.

Happy Valley-Goose Bay forms an important regional service centre for the government including hospital and healthcare services, the corrections facility and justice services, education with the College of the North Atlantic campus, and transportation. It is a strategic location for mining exploration and development and hydro power development. Many people work at the mine on a rotation base and live in Happy Valley-Goose Bay. The community has typical services including fire, police, water, power, electricity, radio, newspaper, television, cable, museum, three schools (Kindergarten – Grade 3, Grades 4-7, and Grades 8-12), and one day care centre. There is no public transit service but there are several taxi businesses.

Happy Valley-Goose Bay serves as the marine transportation hub for the coastal communities in Labrador. However, its ferry and marine coastal supply services only operate June to November. The Trans Labrador Highway connects Happy Valley-Goose Bay to western Labrador. The community has one of the largest airports in eastern Canada. Several airline and charter services link the community with daily flights to the rest of Canada.

The formal economy of Happy-Valley-Goose Bay consists of more than 370 businesses. According to the Pan Arctic Inuit directory, Nunatsiavut has 39 registered Inuit businesses with 14 of these in the Happy Valley-Goose Bay area. Given the Inuit population of the area, the number of Inuit people who actually own businesses is likely much higher.
North West River (previously known as Fort Smith) is located about 33 kilometres from Happy Valley-Goose Bay at the end of the highway. Most residents commute to Happy Valley-Goose Bay for work. This is the oldest community in Central Labrador. Inuit and Innu have lived here for about 6000 years. North West River is located directly across the river from the Innu First Nations community of Sheshatshiu. The town is on the end of a peninsula occupies about 2.6 kilometres squared. It is bordered by the river and Lake Melville. North West River has 492 residents with 225 of those being Inuit (2006 Census). The community is primarily residential with about 180 homes. Most roads are paved but some are gravel. Goodfellow-Baikie showed me the facility of the former North West River Industrial Association project and the Labrador Heritage Museum which is located on the site of the original Hudson’s Bay fur trading post built in 1836.

9.2 Inuit Traditional or Sustenance Economy

Hunting versus Herding

HF provided a brief history of the Labrador Inuit. They were coastal people and really did not hunt much caribou. Prior to the 1920s, the Inuit in the northern area of Nain, Hopedale and Hebron presented different tribes or clans and distinct cultures. Each had its own traditional hunting area and they did not encroach on each other. They lived primarily on seal and fish. When the caribou came to the coastal area, the Inuit supplemented their diet. The caribou migrated and moved inland between Quebec and Labrador. They were hunted by the Innu, the nomadic First Nations people who followed the herd. Because of the cultural differences, the Inuit and the Innu did not coexist in a friendly manner and had skirmishes. HF added that the Inuit actually traded with the Innu for caribou.

Contact with non-Inuit began in the 1500s with the arrival of the French fishing fleets. The Moravian and Catholic Church had a significant impact on how the Inuit and Innu viewed the world. The Moravian missionaries arrived in Labrador in the mid 1750s. After several attempts, they established missions on
the coast of Northern Labrador. As the settlers migrated from Europe to Labrador, the settlers and Inuit intermarried. The settlers adapted the Inuit ways to survive on the land. HF thought the southern coast of Labrador was greatly influenced by the close ties with Newfoundland.

HF commented that early in the 1900s Spanish flu killed off the Inuit population in Okak, Hebron and Nain resulting in the loss of their oral history. Since the 1950s, the Catholic Church had significant influence. The Inuit had adapted to the non-aboriginal influence and culture. HF commented, the religions were paternalistic and their worldly mentality greatly affected the Inuit up to the last twenty years. Both the Moravian and Catholic churches had operated residential schools. HF told how his father left home in the fall and stayed at the residential school all year. Their families were only seen at Christmas and during the summer. Life at the schools was strict and the children were punished if they used Inuit ways. He felt this had significantly contributed to the loss of traditional Inuit culture.

HF elaborated on the cultural aspects of why Inuit still hunt caribou.

HF: The caribou sustains your family. It is free to roam and come and go - just as the Inuit are free to come and go. They do not want to cage the animal. Previously if the Inuit did not hunt, they either starved or died. The hunt is still in the blood. However, times are changing and the mind sets are changing. The availability of wild game started to decline about twenty years ago.

Costs of hunting had increased significantly. HF explained that before you had a dog team, canoe and kayak; today you had the “white culture’s toys” - snow mobile, speedboat and ATV. These were much quicker but were more costly to buy and operate therefore the Inuit needed a regular income. Because the fur traders and fishermen required full time employment, the Inuit became caught up in “white culture”. HF added that now they went hunting more as hobby than an existence and many could not afford to hunt at all.

According to HF, the Inuit work ethic was based on immediate need, the seasons, the sun and light, and the lifestyle. The Inuit either starved or died. In contrast, the European work ethic was based on the clock. A lot of the work was
seasonal, people worked hard in the summer and then Employment Insurance
Benefits allowed them to hunt and fish in the winter. More recently, seasonal
work was disappearing and Employment Insurance Benefits had been cut back.
HF thought the Inuit would adapt to a 52 week culture as development took
place in Labrador. He believed that the Inuit would do this before the Innu
because the latter were more attached to the old way of life. HF commented that
the great grandparents of the Inuit had disappeared from the flu. Then the Inuit
were told they had to go to school to learn new things and were punished if they
used Inuit ways. Now the Inuit had generation gaps where people lacked the
traditional skills.

Today, the Inuit economy was not really tied to seal or caribou. HF and HH
discussed how the Inuit manufactured stone at the quarry in Hopedale and sold
this internationally. They also had a small forest industry.

In Labrador, the caribou still formed a large part of the Inuit diet during winter.
The posters: “Labrador Companion to the Canada Food Guide” and “Traditional
Labrador Foods” hung in several locations. Inuit commented that if they had the
time and money, they hunted caribou for their own meat. The Inuit still
practiced food sharing and preferred not to sell meat. They specifically looked
after the Elders and made sure they had enough food for others. However, HF
thought the Inuit did much less with the hide and fur when compared to the
Innu.

9.3 Livelihood Business

Inuit carvings, particularly from the Nain area, were sold internationally. HF
commented, “Inuit carvers Gilbert Hay and John Terriack sold their work to
museums and collectors worldwide. However, the international market place
only had room for only a few.” HH mentioned: “Caribou was used for antlers,
tools (ulu handles), sculpting, and caribou tufting. Some Inuit used caribou hair
to make top quality fishing flies. Very few Inuit used caribou skins.”

According to HI, “All carvings made from caribou used dropped antler. The
carver was required to obtain a tracking export permit from the Department of
Wildlife if the item was being sold to retailers outside Labrador and Newfoundland. Several court cases involved producers selling whole caribou antlers on eBay without the appropriate export trade permits or misrepresenting antlers from other animals as caribou.”

Inuit crafters were not seen as entrepreneurial. HI commented that most producers did not have telephones. He indicated a major challenge was their lack of orientation to time schedules and not being responsive to business demands for more products. Crafters often did not have registered businesses and cheques were made out to their personal names.

Independent craftspeople had received a lot of training. Although very few innovations had occurred in the crafting processes, the products were incrementally evolving and quality assurance was improving. Some producers used modern power tools which were quicker and did the same job.

HD mentioned several organisations were working to bring back traditional crafts. About ten years ago, the College of the North Atlantic delivered a lot of skills training courses in soapstone, jewelry, print making, slipper making, and craft making. Each of these courses contained a life skills component. The local high schools in Inuit communities have classes in carving and crafts production. The Labrador Corrections Centre offers inmates cultural and carving courses. Caribou tufting classes were offered in the Friendship Centre’s Youth Development Program and in the Mokamie Women’s Centre’s literacy program.

9.4 Formal Economy

Caribou craft products are sold through the Labrador Craft Marketing Agency (LCMA) and retail shops such as the Inuit owned Drum Dancer Arts and Crafts Shop and Slippers ‘n Things.

9.4.1 The Labrador Craft Marketing Agency (LCMA)

The Labrador Craft Marketing Agency (LCMA), located in Happy Valley-Goose Bay was first started in 1996 by the Newfoundland and Labrador Crafts Development Association. This not-for-profit organisation was supposed to be
economically self-sufficient. Federal and provincial government funds assisted with the LCMA’s start-up. According to HI, the primary mission of this organisation was to foster the growth of the Labrador crafts industry. This included increasing commercial craft production, encouraging consistently high levels of quality commercial production, increasing market opportunities, providing marketing and business advice, providing information on avenues to market Labrador crafts, and acting as an intermediary to provide Labrador crafts to retail shops within Labrador and elsewhere.

The LCMA purchased craft products from more than 60 producers across Labrador, although about 50 were active producers. More than 75 percent of these producers were Aboriginal people. Most were Inuit and Métis; very few were Innu. However, the LCMA did not track the producers by Aboriginal ancestry.

The LCMA had developed an identifiable brand and logo “Labrador Traditions” for the quality products sold under the Agency (see Figure 9.1).

The Labrador crafts included carvings made from Labrador soapstone and animal bone (whale or caribou). For example, caribou bone was used for faces, tusks, or platforms. The caribou bone and antler were used to make figures or sculptures (such as an antler with eagle). Other products made from caribou

![Figure 9.1 Brand for Labrador Traditions (photo by Aldene Meis Mason)](image)
included hair tufting, ulu’s, and antler stands. HI mentioned caribou tufting actually started in Labrador and was transferred to the Northwest Territories.

Tea dolls were a traditional Innu doll filled with tea for the children to carry while the family was moving. The Inuit dolls, called parka people, were primarily decorative ornaments. The LCMA also sold ulus, inukshuks, and grass works. The LCMA marketed products through retail and wholesale distribution channels.

HI commented that the LCMA actively sought wholesale markets such as craft and gift shops, tourism operators, museums. Ninety-nine percent of their products were retailed in Canada. Therefore, HI felt that quality, volume, and on-time delivery were very important. Achieving these was difficult for people who were still at the “crafting” stage and did not see themselves in business. When a retailer or distributor was out of product and replacements could not be provided quickly or in the volumes required, HI thought this affected all Inuit producers. HI indicated, “Finding a market for the products he sells is not a problem. Finding the products, however, sometimes is difficult.”

HI used a slipper to demonstrate the problems with quality assurance such as cutting, seaming, and beading. To overcome these, the LCMA had sponsored three slipper making courses in the past few years. HI also explained to the producer the necessary improvements. The LCMA had offered different craft training programs which were tied to the Aboriginal Training Allowances. HI commented that the enrolment had been very low.

The LCMA had several showcases but did not really operate a store. To attract wholesale markets, HI annually attended six major wholesale shows and one retail show (which was larger and more expensive) across Canada. These included the Atlantic Craft Show and the Toronto Gift Show. The LCMA had a website for online orders at http://www.hvgb.net/~labcraft/. This website was developed with sponsorship of the Central Labrador Economic Development Board.
One of LCMA’s main competitors was the Arctic Trading Company. HI felt they offered a wider selection of good quality but at much cheaper prices because of the Arctic Trading Company’s wholesale structure.

9.4.2 Drum Dancer Arts and Crafts Shop

The Drum Dancer Arts and Crafts Shop started in 1997. It was located on the main floor of the Friendship Centre. The Centre operated a 24 bed hostel, primarily for Inuit who were receiving medical treatment. The shop bought and sold traditional handmade Labrador art and crafts products from Inuit, Innu and Métis peoples of Labrador. According to HG, Inuit generally approached the Drum Dancer with a product to sell. However, if the store ran low, the shop would ask the local producer if they could quickly make more items. According to HI, the store also bought products from Arctic Trading Company.

Crafts people required a permit from the provincial government to sell products made from caribou. A copy of this permit was put on the file. Many craftspeople just wanted the money and did not want to deal with the hassles. They did not see themselves as a business. HG mentioned that craft producers often went down to local docks or special events to try to sell their products. This caused a problem when they sold to the Drum Dancer because they did not understand that markup, overhead and wages had to be covered. Shipping costs were also very expensive. The store generally bought from the coastal communities in the fall and shipped the products down by boat. If they ran out of stock, these items had to be flown down to Happy Valley-Goose Bay.

Traditionally the store sold carvings made from soap stone, serpentine and talc. Caribou or whale could be used for small accessories such as harpoons, tusks or faces. Some carvers had begun creating carvings made only of caribou bone and antlers. Carvings ranged in price from CAN$30.00 to CAN$600.00. Inukshuk carvings, made from soapstone and serpentine, ranged in price from CAN$40.00 to CAN$250.00. The snowshoes were made with caribou sinew. The Drum Dancer also sold some mitts and slippers. Most mitts were made from beaver and seal, not caribou. Most slippers were not made with caribou but used cow hide and fur with pile lining. The Drum Dancer sold jewelry made of
soapstone, antler and ivory. HG commented that the Innu Tea Dolls sewn from smoked tanned caribou hide were in demand. Emily Flower, an Inuit, made Inuit dolls which sold for CAN$20.00 (babies) and CAN$170.00 (larger dolls). The Drum Dancer also offered art work such as prints, wall hangings and dream catchers. Each of the products had a card with the producer’s name, what it was made of, and a little story about the producer. The Drum Dancer also sold raw materials such as fabric, hides, and beads. In addition, the store sold music and books about Inuit, Innu, and Métis culture. Their store had recently developed a web site http://www.drumdancer.net which displayed the products. They were beginning to receive internet orders from other countries.

Most of their customers were walk in. From May 1 to September 1 (summer season), the customers were primarily American and some European tourists. The high Canadian dollar was hurting Labrador tourism and therefore reducing the number of customers. The store was also facing increasing competition from other local businesses and internet sales.

Figure 9.2 Inuit dolls and carvings at the Drum Dancer (photo by Aldene Meis Mason)
9.4.3 **Slippers’n Things**

Slippers’n Things was a registered Inuit business owned and operated by Mike and Ruth Voisey. The store sourced its products from Inuit communities along the Labrador coast. The store sold caribou tufting, caribou antler and bone carvings, stone carvings with inset faces made of caribou antler or whale bone, jewelry, slippers, prints and woven baskets. The slippers were made from hide, beaver or seal skin. The slippers ranged in price from CAN$55.00 to CAN$85.00 per pair. The store sold Angela Andrews’ Innu Tea Dolls and Emily Flowers’ Inuit dolls. The dolls were dressed in traditional outfits and their faces were usually made of hide. The larger dolls ranged from CAN$120.00 to CAN$170.00. Slippers ‘n Things had a web site and offered online ordering. Their website displayed photographs of items for sale at [http://www.slippersnthings.com/home/2](http://www.slippersnthings.com/home/2).

9.4.4 **The Craft Council of Newfoundland and Labrador**

Inuit producers could sell their crafts and receive support from the Craft Council of Newfoundland and Labrador. In 2006, the Craft Council of Newfoundland and Labrador opened the First Hands Gallery in St. John’s. Its purpose was to promote traditional and non-traditional works by Inuit, Innu and Métis artisans. The Craft Council also offered an on-line store. Craft products could be searched by keywords for the medium, purpose, producer or price. Many items had a description and picture. For example, caribou hide moccasins were available directly from the producer – Loretta Weber or through the Labrador Crafts Marketing Agency. Prices ranged from CAN$76.00 to CAN$91.50. John Taylor’s Hooded Face sculpture/carving could be purchased for CAN$270.00; Emily Flower’s Tea dolls were available for CAN$190.00.

The Craft Industry Development Program offered new and existing craftspeople financial assistance for marketing, product development, and skills enhancement. The program was administered by the Government of Newfoundland and Labrador Department of Innovation, Trade and Rural Development. The Department also offered a special program, “Crafts of Character”. Special tags and labels were used to signify excellence in creativity.
and craftsmanship. Producers and retailers of crafts, gifts, and clothing apparel could use these to identify products as brand approved. These producers were profiled on the Crafts of Character website and retailers were designated as official Crafts of Character retailers on the website. Retailers received window decals and information cards for display. The brand was promoted in the Provincial Travel Guide, in posters, on all ferries, and in all Visitor Information Centers.

9.5 **Inuit Commercial Caribou Harvesting and Processing**

In this section, I will discuss three initiatives in commercial caribou harvesting and processing: 1) the Labrador Inuit Association 2) Uncle Sam’s Butcher Shop and 3) Robin Good Fellow Baikie’s Caribou Fur Felt Processing.

9.5.1 **The Labrador Inuit Association**

As previously discussed in Section 3.1.5.5, the Labrador Inuit Association (LIA) through its Labrador Inuit Development Corporation operated a commercial caribou harvest and later opened a plant in Nain in 1987 to process and package caribou meat. According to HF, key reasons for the Nain meat processing plant closing were logistics such as the short operating season, the community’s isolation, the lack of water, the high US dollar, high power costs, and the lack of aggressively pursuing the market. If the plant had been located in Goose Bay, there would have been cheap power, access to water and access to the Trans Labrador highway. HF went on to explain that the LIA had to create a market by educating the consumer about caribou meat. In his opinion, the LIA had hardly touched the surface as marketing was quite expensive. Furthermore, the LIA had no knowledge and expertise with international markets at that time.

HH, a senior politician with the Nunatsiavut Government, explained further. The caribou processing plant in Nain had received a substantial investment in building, equipment and marketing. The project was going well and the market was being built. The caribou was being sold on high-end menus. They had built demand over three to four years. Chefs taken to fishing camps were served the caribou in a variety of ways and had liked the product. HH commented that the
LIA found it was very costly to have the meat federally inspected during the harvest and processing. When the George River Herd migration pattern changed, the caribou no longer came near Nain and hunters had to travel much farther. HH said that was a bigger challenge. Finally, the processing facility suffered structural damage from frost. After pursuing a settlement in court for ten years, the LIA finally reached an out-of-court settlement with the insurance company for a big loss.

The Nunatsiavut Government was relooking at caribou herding and examining the potential for caribou farming. The George River Herd was large and had predator problems from wolves and black bear but flies were not a problem. Representatives from Greenland had tested the vegetation near Hopedale, Labrador in summer 2006. However, the project was currently on hold. Labrador had also hosted a conference to discuss partnerships for knowledge exchange around caribou and reindeer farming.

9.5.2 Uncle Sam’s Butcher Shop

In 1991, HA and his son, HB, opened Uncle Sam’s Butcher Shop. Initially the business was a regular butcher handling beef and pigs. HA had been a pig farmer during the 1960s.

HA and HB hunted and processed caribou for their family. When the Labrador Highway opened in the 1990s, local people were able to hunt caribou but their freezers were full. Customers commented they would eat the caribou but their children would not. At the beginning, HA and HB operated in a shell of a building with a band saw. By their third year, through word of mouth, they were being asked to hunt others’ tags and process the caribou.

After the LIA meat processing plant closed in Nain, the commercial caribou license was not being used. HA and HB approached the LIDC and were told of the pitfalls – the caribou migration pattern had shifted and the biggest costs were for shipping and transportation. According to HB, the LIDC had a lot of meat stored but the caribou had not been properly marketed. The LIA provided a letter of support for Uncle Sam’s application for a commercial caribou license.
Uncle Sam’s was initially approved for a commercial quota of 200 caribou in 1997. The license required that they hire Inuit and First Nation Indians. HA and HB’s operation included harvesting, cleaning, transporting, processing and distributing the caribou product. According to HB, “Biologists riding on ski-doo and in helicopters monitor what you do during the hunt. In addition, the caribou heads must be submitted to the authorities for testing.”

Later, their commercial quota was raised to 500 caribou. They usually hired seven to nine hunters, generally spread among the communities. HB personally tried to hunt 200 caribou. As the George River Herd migrated, caribou were not always easy to access. According to HB, five hundred caribou weighed about 30,000 pounds. To keep the costs down, they used the mail plane to backhaul the caribou from the Inuit communities to Happy Valley-Goose Bay. They then used a tractor-trailer to haul the caribou from the plane to Uncle Sam’s Butcher Shop.

HB said their request to have the commercial quota increased to 1500 caribou was refused and this made it impossible to get new customers. Their products were licensed to sell only within Labrador and Newfoundland because they were only provincially inspected. The current quota of 500 did not allow sufficient quantities for federal meat inspection which was needed to sell Labrador caribou products internationally.

HA and HB found it difficult to obtain funding. They began to examine secondary processing. HB paid to attend a two week course put on by Sobey’s in Toronto. Sobey’s was the second largest retail food operation in Canada. HB learned about curing spices, smoke houses, product development, equipment use, and setting up an operation. He recovered CAN$5000 of his expenses from the government.

HA and HB experimented and developed new caribou products. They made jerky, burgers, ground sausage, steaks, roast, stewing beef, bologna, salami, pepperoni, souflaki and ham. Their bologna came in maple and garlic flavours and their sausages were in hot or regular flavours.
Figure 9.3 Uncle Sam's Butcher Shop & Deli (photo by Aldene Meis Mason)

About 50 percent of Uncle Sam’s processed caribou was sold to restaurants and hotels. Demand occurred primarily during the summer season which lasted from May 24 to September 1. The remainder of the caribou was sold within the local community. They also sold vacuum-sealed caribou products in local vending machines, school canteens, gas stations and convenience stores. To brand and promote the product, each package had labels with Uncle Sam’s logo and the map of Labrador. The sign outside the shop also featured caribou heads and the Labrador flag and indicated they sold caribou products.

Caribou was offered on restaurant menus. A small restaurant owner commented that sometimes she could not buy commercial caribou. She was required by the government to sell commercially inspected and processed caribou. Menu prices were: caribou steak CAN$12.95 and deluxe caribou burgers (without French fries) CAN$5.95. Two other enterprises in Happy Valley-Goose Bay offered processing of caribou for local residents but these operations were not Inuit owned and operated.
HB indicated that the original facility had been inefficient. Four years previously, they had processed 3800 caribou mostly by hand with nine people. HA and HB rearranged the space and added a separate entrance and overhead conveyor system for the caribou to enter the facility. They also invested in equipment to speed up the processes. This was funded by selling a house for CAN$35,000. They bought a vacuum bagger for CAN$25,000 and enough bags for three years. They now could handle 2600 bags per hour. Before they stuffed 50 pounds of sausage in a morning; now the same volume was machine-made in eight minutes. Labour for processing the caribou was reduced from nine people to three – one to run the equipment, one to tie, and one to tag. To handle the seasonality of the harvest versus the customer demand cycle, HA and HB purchased a large glass faced refrigerator and two deep freezers.

Recently, they received a CAN$27,727 grant to establish a smoking operation. Because HA was slowing down at 75, HB took over as the business owner. HB commented that Uncle Sam’s was exploring using caribou for pet food because North America had experienced extensive pet food recalls in 2007.

HA and HB felt Uncle Sam’s was successful as it had survived and expanded. A good measure of success was that they were staying ahead of their receivables. HB indicated that they had weeded out the unproductive accounts. Although they were moving the same volume, they had tried to build up the local and tourist markets to reduce transportation and shipping costs.

According to HO, a marketing specialist with the Central Labrador Economic Development Board, Uncle Sam’s Butcher Shop put Labrador well ahead in secondary meat processing when compared to the Nordic countries which he had visited in 2000 with the Arctic Council. Baikie (2000) reported that 1) HA and HB’s small scale processing operation gained three times more earnings by doing secondary processing for the same volume of meat and 2) compared to Scandinavia, Labrador Inuit had considerably less developed handicraft opportunities.
9.5.3 Caribou Fur Felt

Robin Goodfellow-Baikie provided permission for her name to be used. She is the inventor of caribou fur felt and was interviewed at her home in North West River. Her husband’s family was one of Labrador's original Inuit families and had been famous traders.

Goodfellow-Baikie had the idea to weave the caribou hair in 1981. A university professor suggested she “felt” the hair. She applied for a research grant under the Canada Council Exploration Program in Domestic Sciences. Goodfellow-Baikie experimented until she developed a technique to felt the hair and called the product “mouffelt”. Testing revealed the product was twice as warm as wool with 65 per cent of the weight. Goodfellow-Baikie commented, “At the time, I did not have the confidence to take the product further.”

She moved to Winnipeg, Manitoba in 1984 and worked seven years as an industrial sewer in garment manufacturing. In 1988 through consultation with Innu Elders about their traditional knowledge, Goodfellow-Baikie learned how to take hair off hide efficiently. She applied for and received Canadian patent 1255997 on June 20, 1989 and US Patent 4,751,117 on June 14, 1988 for a textile, moufflibou. The patents covered both caribou and deer hair. She indicated these patents have since been donated to the public. She also registered a logo with the caribou profile and had this associated with the caribou-fur felt product. The caribou-fur felt technology was also appropriate for white-tail deer hair and was covered by the patent. Other products which could use the caribou fur-felt liners included hats, vests, and sleeping bags.
Caribou hair was available as a by-product of the annual sustainable harvests. Caribou hides and hair were generally discarded. With her patented process, the caribou skins were first soured and the hair was removed by scraping. The hair was carded then spun with a mix of sheep’s wool. The wool was then woven and felted to make a fabric. During felting, the caribou hair/wool combination collapsed after exposure to steam and formed caribou-fur felt. The caribou fur felt had significant warmth advantages.

In 1987-88, Goodfellow-Baikie carried out a prototype field project in Nain, northern Labrador with the LIDC. Skins obtained from their commercial caribou harvest and processing plant were used to make the caribou hair/wool felt batting by hand. The cottage industry created twelve pairs of snowmobile mitts which had deerskin palms; caribou fur/felt liners and Grenfell cloth backs. When local Inuit hunters tested the product, Goodfellow-Baikie was told these were the warmest mitts they had ever worn and the mitts remained warm even when wet (see Figure 9.5).
Goodfellow-Baikie commented that workers reluctantly participated in the project saying they wanted to do men’s work like fishing. The Inuit in the project found the felt-making process messy, dirty and smelly compared to their experiences fishing and in the fish plant. In her opinion, the Inuit did not value and understand the concept of sustainable development at that time. She also felt they did not have a strong work ethic. Normal domesticate household sewing machines were not strong enough to sew through the caribou fur felt liners and Grenfell cloth backs. The first machine used for this project was destroyed. Goodfellow-Baikie developed a prospectus for Makkovic Prototype Glove Making with the Caribou Fur Felt.

Goodfellow-Baikie undertook projects first with the Innu First Nations community of Sheshatshiu and then later across the river in North West River. The Sheshatshiu Innu traditionally smoked deer skins and used the hide to make shoes. Building on this, Goodfellow-Baikie attempted to create a sustainable cottage industry making caribou fur-felt. After several years of working at the grassroots with the First Nations community, the project did not go ahead. Three reasons for this were: 1) the difference in vision between the grass roots community members and the community leaders on what economic
The Innu project served as her thesis for the Masters in Adult Education at St. Francis Xavier University (Goodfellow-Baikie, 2001). Goodfellow-Baikie and English (2006) later published a case describing the project.

According to Goodfellow-Baikie, the Inuit and Métis people of North West River located just across the river already had the concept of craft industry. The community created the North West River Industrial Association (NWRIA) as a not-for-profit community development corporation in 1999. Because of the downturn in the fishing and forestry industries, North West River was identified as an economically depressed area. The NWRIA project received CAN$144,000 grant for three-years under the Canada-Newfoundland Agreement for the Economic Development Component of the Canadian Fisheries Adjustment and Restructuring Initiative. The project’s objectives were to assess the technical and market feasibility of using caribou hair as a liner for mitts and other garments. The project would help test the type and scale of potential in Labrador. The NWRIA also received funding and technical assistance from Carleton University’s Community Economic Development Technical Assistance Program in the form of strategic and operational planning, selection of a corporate structure and training in negotiation skills with investors. The project received a CAN$12,683 grant from the Atlantic Canada Opportunities Agency under the Canada Rural Partnerships in 2000-2001 (Canada Rural Partnership, 2000-2001).

The NWRIA project had envisioned handling 2000 caribou hides each year. The cottage industry was based on 370 hides per year. It required one manager and four full time workers. The project hired an administrator, three sewers, one sewing instructor, one picker/carder and one felt maker/washer. Prospective employees were screened for work ethic, manual dexterity and the ability to listen to, understand and follow directions. All the people contracted under the project and the NWIA Board signed non-disclosure agreements. A felt-making
A technician with her own business in Newfoundland provided consulting expertise and assisted in the manufacturing start-up.

Because of the fragility of the caribou hair, she had the special “Goodfellow Feltmaker” designed and built to her specifications. The machine which measured eight feet by eight feet was first made in 1997 by a local machinist in Goose Bay under license. Goodfellow-Baikie shared a picture of the machine and the story from the Labradorian newspaper (May 5, 1997 Section A p. 5). An important feature was the machine’s ability to collapse so it could fit through 32 inch wide doorways and easily be set up in a room. The equipment also was designed to be very strong. When we toured the abandoned facility of the North West River Industrial Association, the machine was in a dark room as the power was shut off. Because Goodfellow-Baikie was concerned about intellectual property protection, I was not allowed to approach the equipment.

For two seasons in 2000-2001, they purchased the caribou skins for CAN$5 each from Uncle Sam’s Butcher Shop and from local hunters. Two hides were put flesh to flesh, covered with plastic, and left in a separate room for about a week. Goodfellow-Baikie mentioned that when they removed the caribou hair no warble flies were on hides in North West River but in Nain there had been flies on the hides. She later learned 75 per cent of hides were not useable for tanning because of warble fly damage. However the damaged hides could still be used to make caribou fur felt.

The pilot and prototype stages demonstrated that caribou fur could be used to make insulated liners for gloves. The project made 300 pairs of high quality cold weather mitts – 100 were of really good quality and 100 were Grade B. The gloves were stamped with the unique Caribou Fur-Felt logo. Goodfellow-Baikie sold the mitts at trade shows for CAN$175 per pair. Caribou fur felt was not sold in any market place.

Scraps from the felt cutting were put in low round pillows which people used as seat cushions at hockey rinks. Each hide also had three to four pounds of caribou meat which was removed and could have been used for pet food.
According to Goodfellow-Baikie, the National Research Council had found waste caribou meat could be added to bark as a compost ingredient.

The Atlantic Canada Opportunities Agency stopped funding the project after money was used to repair the building’s roof and this was not an allowable project expense. She approached Memorial University’s Genesis Centre for Innovation in St. John’s, Newfoundland but was told since the project involved sewing they were not interested in it. The government also was reluctant to fund the project as other projects and enterprises involved in clothing manufacturing in Atlantic Canada had failed.

Without more financial resources, Goodfellow-Baikie was unable to move past the pilot and prototype phases. Some communities were interested in purchasing the equipment and the rights to the technology. The Central Labrador Development Board had supported the NWRIA in its project and they were currently working with a local entrepreneur to revitalise it (Best, 2008).

In describing how she measured enterprise success, Goodfellow-Baikie expressed pride in her accomplishments: developing the caribou fur-felt, patenting the process, demonstrating its possibilities through the pilot and prototype stages, and creating a sustainable cottage industry. She also mentioned the project had provided employment for local Inuit and Innu. Goodfellow-Baikie indicated the fur-felt process was suitable for cottage industry and strongly supportive for communities interested in sustainable development.

9.6 Barriers to Inuit Enterprise

According to HF, barriers to Inuit enterprise depended on the product. However, a huge obstacle was the lack of investment and working capital. Because of Labrador’s isolation, market development for products took more time and money. Isolation also resulted in prohibitive transportation costs to connect products with the market. Several interviewees mentioned that Inuit lacked the necessary skills and money was needed for training.
Inuit culture also presented a barrier. According to HH, “Inuit people are not really entrepreneurial”. HF commented that the Inuit culture and mindset were transitioning toward a regular working environment but the Inuit are still adjusting – “the hunt is still in the blood”. There were major social problems.

HI felt that major challenges also included the cost of marketing. As Labrador was not connected to the mainland, product development and new products were lacking. Getting the permits to export outside Labrador and Newfoundland to the rest of Canada was difficult. Both HG and HI mentioned a key problem was that the crafting skills were not being passed down. HG explained that caribou products tended to be made by the older people and the traditional knowledge, skills and talent were disappearing.

According to HK, the College of the North Atlantic was developing a certification program for Community Development Officers at the request of the government. This initiative would help communities to identify more business opportunities which were commercially viable.

9.7 Inuit Measures of Enterprise Success

Most Inuit livelihood enterprises were in survival mode. HI felt their success could be measured by the numbers of crafters being paid and the size of the cheques, which reflected the volume and prices obtained for the products. The number of crafters receiving training was important as this resulted in improved quality of output. HG indicated the craftspeople would measure success based on obtaining money for their products.

In the formal economy, measures of success for Inuit enterprises involved with commercial caribou harvesting and processing included profitability, growth in sales, managing accounts receivable, delivering a quality product, job creation, and reputation. Another measure of enterprise success was use of traditional resources, knowledge and skills. Goodfellow-Baikie also thought sustainability and environmental impacts were important measures.
9.8  **Inuit Cultural Resilience and Change**

The Inuit in Labrador had experienced the longest period of colonisation when compared to the other Canadian sites. According to HH, the strong missionary influence, widespread death of Inuit from the flu, and residential schooling and participation in the wage economy had resulted in the significant loss of Inuit culture. On the other hand, Inuit in northern Labrador as they were more isolated had maintained more of their culture and traditional ways of life.

For over 30 years, the Labrador Inuit Association had actively pursued the Inuit land claim and the preservation of Inuit culture. The recent land claim settlement would have a significant impact on restoring the rights to preserve and practice Inuit culture, education, society, and livelihoods. HF commented that modern technology had invaded and computers were a part of life. He added that natural resources were readily available for development so economic development was here to stay. Lifestyles would continue to change but adjustment and adaptation took time. HF felt the economic development would create other social problems. The Inuit twenty years from now would be significantly different.

9.9  **Learning from Others**

The Inuit in Labrador are interested in learning more about Sámi reindeer herding and its associated products. They had recently had the Sámi visit to test their vegetation and were discussing with the Sámi the possibility of caribou ranching in Labrador. They suggested I write a case about their Inuit quarry which shipped stone to international markets.

9.10  **Conclusion**

Chapter 9 is the fourth of five chapters which present the exploratory descriptive cases. Happy Valley-Goose Bay and North West River are located in the middle of Labrador and are strongly integrated with the modern wage economy. However, Inuit residing in northern Labrador were more closely tied to the traditional economy.
The key points that were identified as a result of interviews in Happy Valley-Goose Bay and North West River were as follows:

- Labrador and Newfoundland represented the earliest points of Inuit contact with western civilisation in Canada. The effects of colonisation, disease and residential schools had resulted in significant loss of Inuit culture especially in the middle regions of Labrador.
- Inuit still participated in the subsistence economy but were becoming more involved in the wage economy. The combinations of major resource and economic development with technological change were changing Inuit traditional cultural practices.
- The Inuit pursing livelihoods through craft production did not see these as businesses. Major Inuit crafts made with caribou included carvings, jewelry, dolls, clothing (such as mitts and slippers), and artwork such as caribou tufting. The Labrador government through its marketing board was actively linking craftspeople to markets and increasing the quality of the output.
- The formal economy included the LCMA and Inuit owned retail shops such as the Drum Dancer Arts and Crafts Shop and Slippers ‘n Things. They purchased items from Inuit and other Labrador based craftspeople. To assure the authenticity and quality of the products a special logo had been developed and training was offered by the government.
- The commercial caribou harvest and processing operations included the Labrador Inuit Association’s discontinued Nain operation, the ongoing Uncle’s Sam’s Butcher Shop which held the current commercial caribou license and the discontinued prototype and pilot projects of Goodfellow-Baikie which made caribou fur felt. These enterprises illustrated Inuit ownership and partnering. Products from these operations were traded only in Labrador and Newfoundland. Active experimentation had resulted in innovative uses of by-products from the caribou processing. Both the Battcocks and Goodfellow-Baikie had made considerable personal investment in their operations.
• Measures of Inuit success included the survival of enterprises; number of Inuit employed and size of their earning; training provided; use of traditional resources, knowledge and skills; and product quality. For more developed enterprises, operating measures such as profitability, sales, new markets/product and accounts receivable were added. Some Inuit thought environmental impacts and sustainable were also important.

• Barriers to Inuit enterprise included remote and isolated location, lack of financial resources, lack of developed markets, high operating costs, and the Inuit life style.

• Although Inuit culture was seen to be a barrier, this was changing. Inuit were becoming more involved in the new economic and resource development projects.
Chapter 10 presents the fifth of five cases which report the exploratory descriptive cases at each of the research sites separately. This chapter about Jokkmokk in Northern Sweden is organised in the following manner: community context, Sámi reindeer herding, Sámi enterprises connected to reindeer, barriers to Sámi enterprise, Sámi measures of enterprise success, Sámi cultural resilience and change, learning from others and conclusion.

Table 10.1 Description of Jokkmokk interviewees

| JA: Sámi, female, reindeer herder & entrepreneur | JB: Sámi, female, reindeer herder & entrepreneur |
| JC: Sámi, male, reindeer herder, Elder statesman | JD: non-Sámi, female, reindeer herding family, manager of NGO |
| JE: Sámi, female, reindeer owner, manager NGO | JF: Sámi, male, reindeer herder |
| JG: Sámi, male, reindeer herder & meat processor | JH: Sámi, male, carver |
| JJ: Sámi, female, reindeer herder, tourism services, JI: Sámi, female, handicrafts | JJ: Sámi, female, reindeer owner, clothing designer |
| JK: Sámi, female, handicrafts | JL: Sámi, female, handicrafts |
| JM: Sámi, male, academic leader | JN: Sámi, female, handicrafts |
| JO: Sámi, female, government manager | JQ: Sámi, female, restaurant owner |
| JR: Sámi, male, carver, teacher | JS: Sámi, male carver |
| JT: Sámi, female, handicrafts & artist; previous owner of retail store | JU: Non-Sámi, female, handicrafts & store owner |

10.1 Community Context

The field research in Jokkmokk, Sweden took place during November 2007. The municipality of Jokkmokk is Sweden’s second largest municipality by area. It has a population of 5,500 inhabitants with more than 3400 in the central town of Jokkmokk. There are five Sámi villages (sameby) in the area: Sirkas, Jåkkåkska, Tuorpon, Sierron, and Udtja. About 750 Sámi people live in Jokkmokk.

Jokkmokk is located a few miles from a bend in the Luleå River at 66° 40’ north latitude, 19° 15’ east longitude. The community labels itself as “Wild, cultured
and beautiful”. Jokkmokk is very accessible. It is about 120 miles north-west of Luleå on Route 97 and 740 miles north of Stockholm. The bus runs daily (three hours from Luleå) and (18 hours from Stockholm with layovers). The train runs from Stockholm to Murjek and a bus connected to Jokkmokk. A special train runs directly to Jokkmokk during the summer and the Jokkmokk Market in February.

The District of Jokkmokk has four national parks, many nature reserves, and the World Laponia Heritage Centre. The area has rivers, forests and mountains. Several hydro-electric power stations and dams are located in the district.

Government services are the major employers with the municipal offices, hospital, schools, train/bus station, post office, library, and tourist information centre. The business district in Jokkmokk covers about eight blocks. Jokkmokk has many small businesses such as bars, restaurants, banks, pharmacy, veterinarian, medical and dental offices, taxi, two hotels, and a family tourist hostel. Retailers sell clothing, groceries, books, sporting goods, electrical items (radio and TV), pet supplies, handwork and souvenirs, drapery and fabrics, baked goods, car rental, photo services, camping sites, glass ware, vehicles, motorcycles and bicycles. Jokkmokk has about 400 registered businesses.

The *Strukturum* (local business resource centre) is located in the same building as the *Sámeportalen*. The *Strukturum* is owned and operated by the Jokkmokk Municipality, Vattenfall AB, the Federation of Jokkmokk and Sparbanken Nords Enterprise Foundation. It provides expertise to the local business community and helps strengthen the regional economy. The *Strukturum* listed 55 local businesses in Jokkmokk, *Vill du shoppa? Har far du tips!* However, I was told they did not know the number of Sámi owned and operated enterprises in Jokkmokk. The *Strukturum* does not become involved in Sámi business as this is the responsibility of the *Sámeportalen*. The *Sámeportalen* provides administrative support to the five *sameby* located near Jokkmokk. They also assist in maintaining

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Sámi culture. The Sámeportalen produces a magazine to interest young Sámi in the Sámi language culture and traditional knowledge.

10.2 Traditional Economy

Being Sámi was more than reindeer herding. Sámi culture includes reindeer herding, hunting birds and game, fishing, and gathering food. Today, Sámi do not hunt reindeer and would not let others hunt them (JC). JD commented, “They hunted reindeer a very long time until the 1600s. More than they tamed reindeer.” JC added, “They had some tame reindeer for carrying things.” As they faced pressures for land, the Sámi formed domesticated herds. JF commented, “It is against his personal values to shoot a reindeer. However, sometimes a reindeer may refuse to migrate to the mountains and remain in the forest in the summer. If this happened, he would have to shoot the animal.”

Sámi hunt elk, moose, arctic grouse, bear and lynx. However, they do not hunt wolf, eagle, and wolverine as these were protected species. Reindeer herders keep the meat and fish for themselves and sell the rest. Sámi still gather berries, fruit and plants for food and use plant materials in their handicrafts.

10.3 Sámi Reindeer Herding Business

Sámi have herded reindeer since the mid-1800s. The interviewees’ families had been reindeer herders for many generations. According to JC, “I have been doing this my whole life. I grew up with this and have been working since I was 17. It was in my family as far as we can trace back several hundreds of years.” Today, reindeer herding was still a family business. JC said, “We have a family company. My two sons work with reindeer. My two daughters have reindeer but do not actively work with them.”

Both men and women own reindeer. Often when a Sámi child is born it receives reindeer as a gift. JE, a Sámi professional woman, mentioned, “I do not have so many reindeer - not over 100. I have someone tending my herd.” JA and JB said, “We are lady reindeer herders. We both were born and raised in reindeer families. We are both Sámi running our traditional reindeer herding businesses.”
Ownership is shown by a special pattern of notches on the reindeer ears or cuts on their fur. I was shown a book with pictures of the registered Sámi fur marks. The practice was somewhat similar to cattle brands in Canada.

The Sirges sameby consists of about 500 people who with their children are reindeer herders. It also has about 90 to 100 family companies (JA & JB). These numbers do not include women and children who had left the village but returned for holidays and Christmas. Many families help at the gathering and separation. After some reindeer are slaughtered, this meat is taken home.

JA and JB: Here in Sweden the reindeer herders have their own law that is very old fashioned. Until 1970s the law told us if you were a reindeer herder you could not do anything else. You were not allowed to have other companies. Some people must go out and take a job. [They are] not allowed in the village any more [as members].

From May to October, the Sámi reindeer herders manage the reindeer together up in the mountains. The whole village has about 15,000 reindeers spread out grazing. The families have used these grazing lands for generations (JF). In late November, the Sámi split the reindeer into family groups and move them down to the forest to their winter grazing lands until April. Each family has their own traditional places. The reindeer are moved from the mountains to the forests with cars and trucks. During the winter, the reindeer herder drives to the forest in the car and then uses snowmobiles and skis to check on the reindeer (JF). They want to ensure the reindeer are safe from predators, have enough food, and remain in the family’s grazing area (JF). The reindeer eat lichens on the ground or old forest trees, mushrooms, berries, twigs, plants and grasses. When there is rain or melting snow that has frozen, reindeer have difficulty feeding. JF gives them fodder or moves them to areas with less ice and snow so they can dig down. They also use a tool to break through the snow and ice for the reindeer to feed (JS). The availability of vegetation like lichens and mushrooms is declining as the old growth forests are cut down.

Predators increasingly are becoming a problem, especially in the spring with newborn reindeer calves. Reindeer herders are reimbursed for loss due to protected predators. Previously, they had to find the dead animal to receive
compensation. Now, they count the number and types of predators in the area. The sameby and government together maintain this inventory. Each type of animal has a different price. The sameby receives the compensation and divides this among the reindeer herders.

According to JD, the natural behaviour of reindeer is to move from the coast of Norway in the summer to the coast of Sweden in winter because of mosquitoes and grazing vegetation. In the 1860s, the Norwegian government did not want so many reindeer coming over to Norway, so the Swedish government forced the Northern Sámi to move south to the areas of Jokkmokk, Kirina, and Västerbotten if they wished to keep their large reindeer herds (JE).

Reindeer husbandry is often shown in pictures as men’s work. Herding reindeer, slaughtering, meat processing, hunting and fishing are associated with the men. At the Äjtte Swedish Mountain and Sámi Museum, the exhibits also illustrate women’s activities such as milking, food preparation, clothing production, food gathering and berry picking. In response my question: Is reindeer herding more of a man’s occupation? JA and JB responded, “Jokkmokk is different from the other Sámi culture. Here the women have another culture. Women work in Jokkmokk. Here the women have always been involved in the reindeer herding by taking care of the reindeers and having their own reindeers. If you go up North, it is more men’s work.”

*JE:* In the past, young girls and boys watched the reindeer together. But when they got married and had kids, the girls stayed at home to take care of the kids and house. Today, some girls work with reindeer herding. Not every girl can do it. They are out in the cold a lot. It is very physical hard work. You have to be very strong. They get the reindeer together to the corrals. They mark the calves. During the separation, they are in the corrals when they take out the slaughter reindeer. They mark and divide the herd into smaller groupings.

At the reindeer separation I attended, women participated with the men. Women marked reindeer, listened to the directions of the Sámi leader, led reindeer into the corral, wrestled them over to the wall, divided the herd, injected the vaccines (see Figure 10.1), attached ear tags and collars, opened chutes or gates, and loaded trucks. Behind the gates, other women tended children, kept the fires,
provided hot drinks and foods, and helped with the reindeer in the chutes or holding pens. Extended families shared the work at the separation.

Although it was difficult, some Sámi tamed reindeer. Often, a lead reindeer was tamed to assist the reindeer herder in getting the other reindeer into the corral. JG showed me a reindeer he was taming to pull tourists on sleds during the Jokkmokk Market.

![Figure 10.1 Harness with vaccine to inject reindeer during separation](photo by Aldene Meis Mason)

**Sámi Land Claims and Rights**

In Sweden, the Sámi did not actually own the land now. Previously the Sámi had obtained the land but the government had removed the land and sold it to the settlers. JA and JB explained about land ownership, “No, we don’t. We want to […]. But, we call it our land because we know it’s our land.”

JC: The Swedish state has stolen our rights of land and water. This was complicated in Sweden because of the land conflicts. Three of the areas belong to each of the Sámi families, the borders are clear. The government (the state) has come in and taken the land away from the people. The state says they own the land. In the Sámi history, the land was theirs and they were paying taxes for it. The settlers came and bought the land from the state.

The Swedish government granted Sámi reindeer herders grazing rights only on specific tracts of land. JE and JF used topographic maps to show me the current locations of their sameby, water, land areas, reindeer grazing areas, and access roads. JA and JB commented, “It is about the land. Other people have needed
our land for the tourists and the forests. They have cut the trees.” JR gave me a
book by Lars Pirak explaining the history of the Sámi. As we drove into the
mountains, JV showed where Sámi had moved several times because their lands
were flooded during hydroelectric projects.

Sámi in Sweden and Norway have different rights around reindeer herding. By
law, only Swedish Sámi people are allowed to own and raise reindeer (JC).
Although other Swedish people are allowed to own a reindeer, they are not
allowed to raise it (JE and JF). JE commented, “They need someone from the
Sámi people who is a member of a village to herd the reindeer for them.”

JC: In Norway, the laws are different. To do reindeer husbandry, you
would need to have a registered business. In Sweden, you have to be a
member of the Sámi village sameby. In Sweden, you need to have
registration to sell the reindeer. If you had other people tend your
reindeer then you wouldn’t need it, but you could only have a maximum
of 30 reindeer. There is a special registry just for Sámi reindeer
businesses in Sweden. The Swedish Department of Agriculture used to
have it; now it is the Sámi Parliament. However, this does not provide
special rights for purchasing or working with other companies. It is only
for reindeer herders.

Some uncertainty exists in Sweden whether Sámi and the sameby are allowed to
become involved in other enterprises. JA and JB when describing the start-up of
their business explained, “Somebody told us you cannot do that [have a
business]. If you look at the [Swedish] government’s law for reindeer herders,
you can only be herd reindeers and you cannot develop nor do anything else.”

There was no special Sámi register of businesses for Sámi people involved in
producing and selling other products (JC, JF, and JG). The sameby, Sámi
reindeer herder and Sámi meat processor would not get special rights to
government contracts because they were Sámi (JF, JG). This was unlike the
Canadian government’s Aboriginal Procurement Program and the Inuit Business
Registry. However, JU, a non-Sámi business owner, commented that the Sámi
were often given special privileges.

Sámi used some antlers (horns) for themselves but most were sold. According
to JG, the better horns were sold to Sámi craftsmen and the lesser quality horns
were sold to non-Sámi for items like key chains and potato pokers.
In Sámi culture, it was acceptable to sell reindeer. Until 50 years ago, they traded and exchanged the reindeer. I was told they started to sell the reindeer in the 1960s. However, JC and JE mentioned when they started varied in different areas of Sweden. Reindeer herders still slaughtered and processed some reindeer for their families and close friends. However, most were processed on a large scale as there were many regulations.

_JG:_ Normally when you slaughter, you take the bulls, old cows and cows which did not calf. Usually, the reindeer are sold as a whole animal to local buyers who slaughter and process the meat. To process on a large scale, there are many rules and conditions such as facilities with separate toilets and changing rooms, special equipment and the handling to ensure food safety.

The Sámi still use all parts of the reindeer including the skin, antlers, stomach, intestines, blood, feet and bones. A key Sámi value was not to waste any part of the reindeer.

_JC:_ Before you would use all parts of the reindeer - the skin for clothes, meat, and antlers for everyday tools. We didn’t throw anything away, not even the stomach. We clean the stomach and the intestines. The stomach is mainly used for serving the blood and for blood sausage. We clean and fry the small intestines to eat. In France, it is a delicacy. The caribou has feet (not hooves, those are for horses). We cook the bones to get the marrow out. That is the finest food you could offer a visitor. This is a delicacy.

Reindeer herding has high prestige. According to JE, “If I meet an older Sámi who does not know who I am, they ask if I have reindeer. I have reindeer but I am not herding them. There is a difference between those that have the reindeer and those that [do] not.” Many Sámi interviewees said it was not appropriate to ask how many reindeer a herder owned. JC, JF, and JG explained more about reindeer ownership. The government sets a maximum number of reindeer each _sameby_ was permitted to own. The _sameby_ then decides how many reindeer each family can own. Villages differed in the amount of land and how much was good for grazing. Some years the _sameby_ had to slaughter off up to 20% of the reindeer herd to match the required government limit and to save the grazing lands so their reindeer were not badly fed or starving. The _sameby_ made most
decisions by consensus (JC, JE & JR). JC and JF indicated the sameby would
decide by consensus how many reindeer each family would have to kill.

Sámi people paid taxes to the state. Every reindeer herder had to be a registered
business. JE said, “So if you have 150 or 200 reindeer, you still have to be
registered as a business. I have to declare each year how many reindeer I have
slaughtered and how many I have eaten myself.”

**JF:** In Sweden, when you have reindeer you have to pay taxes (storage
tax) based on how many reindeers you have. When you sort out your
taxes every year for the amount of reindeer, you have to pay taxes on
the income you receive when you sell the reindeer for slaughter.

The Sámi have proposed changes to the tax laws which would allow them to
reduce the variability of their income from year to year.

**JF:** The reindeer herders have proposed a different kind of taxation
similar to that used for the forest industry. If one year you sell a lot of
reindeer, you could even those out over a couple years. In reindeer
herding, sometimes you have to sell off more and have to take it all as
income the same year.

People are finding it difficult to make a living from reindeer herding. JA and JB
suggested, “It would take about 800 to 1000 reindeer if you only lived off of
selling the meat. Few Sámi have that many reindeer, only two or three reindeer
herders.” JF commented, “Sameby villages do not make very much profit; they
more or less breakeven. But, profits would be shared among the sameby
members based on reindeer holdings [not like a cooperative].”

I was given the Svenska Samernas Riksförbund 2005 report, *Rennäringens
intäker och kostnader*. This report compared the profitability of reindeer herders
with different herd sizes in different regions. JF pointed out that for Region G
Norrbotten, Sweden (where Jokkmokk was located), profitability for 100 to 300
reindeer was highly variable but had dropped from -184 SEK per reindeer in
2001, to -237 SEK in 2004 (p. 14-15). Profitability for 400 to 600 reindeer in
Region G was also highly variable but had dropped from 128 SEK per reindeer
in 2001, to 110 SEK in 2004 (p. 28). As their incomes were declining, more
Sámi were seeking income from other sources than reindeer herding.
JE: There are fewer reindeer herders today who can live on it. You need two or three thousand reindeer to live on it. That is the direction - big industry. Many small reindeer herders have other things to make money. They are not in the reindeer business every day. They have to do something else like handicraft, teaching or being a handicraft teacher. They must find another type of work to get money for the family.

**Entering the Business**

When Sámi married into the *sameby*, they brought their reindeer. They also purchased reindeer when the *sameby* held the annual auction of the unmarked reindeer. When an individual retired or died, their reindeer were transferred to other family members. According to JC, “Normally it would go from the father to one of his children. This is not just to the oldest son. It could be any one child or all of the children. But, it [the practice] can be different between the different Sámi villages.” One entered the reindeer herding business by taking over a closing business, by inheriting from their father or other family member, or by applying within the Sámi village to start up a business (JG).

The Swedish government provided an agricultural start up grant in recent years for young people wishing to enter the reindeer business (JG). This could be used to buy reindeer from different *sameby* to ensure the breeding remained strong. Grants were available for individuals or the *sameby* to buy equipment like snowmobiles, ATV’s, and tools for men and women. According to JC, “Some people have gotten grants but it is not really widely spread. They mostly will buy equipment with their own money.”

The European Union provided a start up grant for young Sámi of 250,000 Kr for buying reindeer equipment like snowmobiles. When JG started reindeer herding after leaving school, he received a grant of 3000 Kr half of which had to be repaid after 5 years. He used this grant to buy unmarked three year old calves at an auction held within the *sameby* for its members. JG added, “In those days, reindeer were really cheap - about the same price as a lottery ticket. You got a lot of reindeer for 3000 Kr. But he was also allowed to do this thanks to the older people who did not raise the bids when they saw he was interested in
starting up.” JF mentioned there was no grant when he started therefore his parents and uncles assisted him.

Reindeer herding increasingly uses technology like helicopters, snowmobiles, four wheel and two wheel vehicles, motorcycles, GPS, GSM, cell phone, satellite phones, walkie-talkies. A Sámi commented, “In some ways, Sámi are very quick to take up things like the scooter in the 1960s. It is very good.” However, with the new technologies, Sámi need fewer reindeer herders.

JC: When I was five or six years old, the first things with technology started to come into use. When they couldn’t find the reindeer ox, the whole family would move. The first helicopter was used for herding reindeer in 1970-71. Now it is commonly used to get the reindeer into the corrals for the separation. In 1966-67, the first snowmobiles were used in the Sámi village. Today, the snowmobile is one of the most used tools. They also used both four wheel and two wheel vehicles for herding reindeer, fishing, hunting, and transporting the meat. Today we use […] GSM, cell phone, and GPS satellite phones. [We also use] earphones for communicating on the walkie-talkie while driving the snowmobile.

Motorcycles were used in the summer for gathering reindeer (JM). JE commented, “Very few reindeer herders use skis anymore in winter around the reindeer herd. Now, they use snowmobiles. The reindeer are used to the machine and are not disturbed by the noise. With the technology, you need less reindeer herders.”

Herders no longer wear traditional clothes made from reindeer skin and pelts when working with the reindeer. Instead, they wear thick, modern clothes. JF commented, “Many still used the traditional shoes because these were very warm. But, when driving the snowmobile, it was dangerous to wear the traditional shoes because the braids could catch in the tracks.”

10.4 Other Sámi Entrepreneurs Using Reindeer

Sámi sell the meat, skin, and horn. The horns are sold for the handicrafts. The mature horns are sold internationally for food or potency medicine. The Sámi I interviewed sold their meat and products within Sweden. JG indicated that several years ago the Asians had purchased parts of reindeer but this had
stopped. Unlike in Russia, the Sámi in Sweden do not cut off and sell the immature antler buds (JA, JB, JC, and JF). According to JA and JB, “We never do that because the reindeer bleeds so much it can die. Sometimes the reindeer have an accident so you would need to take [the antler] away. It is not so fun. They are bleeding so much they can die.”

Some of the Sámi crafts people attended markets and fairs throughout Sweden to sell their products. The municipality of Jokkmokk actively encouraged international tourism and business visitors. The Jokkmokk Market was a large tourist draw each year.

10.4.1 Carvers, Clothing Producers and Artists

_Duodji_ are the handicrafts made by the Sámi that use Sámi traditions, designs, patterns and colours. The Sámi _duodji_ are based on practical items reflecting Sámi way of life. Traditionally _duodji_ items were used everyday such as bowls, knives, clothing, belts, travel chests, pouches and bags. _Duodji_ are made from many different inputs including reindeer bone, antler, skin, wood, birch bark, pewter, silver, cloth, beads, amber, and glass. JC commented, “Here there are a lot of people even in the Sámi village doing both hard and soft crafts and also art and art products. A lot of these things have changed from objects we would use to become art.”

Both men and women produce _duodji_ however traditionally men worked with the “hard” (horn, bone and wood) and women worked with the “soft” (skin, sewing clothing and bags). Figure 3 shows reindeer carvings by Lars Pirak. The traditional roles of men and women are becoming less distinct. JA, JB, JM, and JR indicated that more men were doing the soft handicraft and more women were working with the hard. A few young women have enrolled in the “hard” classes offered at the Sámi post-secondary institute (_Samernas Utbildningscentrum_) (JM, JR).

Today, _duodji_ are produced and sold to earn a livelihood or to supplement the family income. Special _duodji_ markings and tags declare the authenticity of the
Sámi handicraft (see Figure 10.2). These markings and tags cannot be used if the item contained no Sámi handcraft. Duodji items with the markings and tags are juried to determine if a Sámi had made the product, traditional Sámi processes were used and the quality was high enough. A register is kept with each juried Sámi craftsperson’s name, membership and signature. When I examined the register, nine of the interviewees were listed. I also looked at the exhibits of Sámi duodji and the items for sale at the Åjtte Swedish Mountain and Sámi Museum in Jokkmokk and at the Swedish Museum of Civilisation in Stockholm.

Young people learn to make the hard and soft crafts from older family members such as their parents, grandparents, aunts and uncles. However at the Sámi post-secondary institute, the young people learn that different sameby make things in different ways so they learn from their teachers and each other. JC elaborated, “Between the Sámi villages there are a lot of different ways to do things. There are a lot of similarities but there are many things are unique for each Sámi village.”

The Sámi carvers use the better reindeer horns to make knives, bowls, spoons, containers and other traditional Sámi items. Reindeer horn carving is considered to be a prestigious Sámi occupation. Carvers receive higher compensation for their work then those using reindeer in the “soft” crafts (JH, JR, JS, JK, JL, and JN). Extensive collections of knives hung on the walls in several Sámi homes.
Carvers were not well paid. It is a life style. Very often many of them work at two or three jobs. A Sámi knife took 40 to 60 hours of work and was worth 5,000 to 6,000 SEK; the exclusive ones took more than 100 hours and went for 8,000 to 10,000 SEK. Established carvers earned about 200,000 SEK per year compared to an ordinary worker who got about 300,000 SEK.”

Carvers are having difficulty obtaining high quality reindeer horn because the Sámi are slaughtering the reindeer much earlier (JA, JE, and JS). JR commented, “To have good quality reindeer horn, the reindeer must be six years old. But now they don’t allow the reindeer to be that old.” They also were starting to have difficulty obtaining appropriate wood (JR) and it took several years to dry it.

Carvers must increase productivity and efficiency (JH, JR, JS). The workshops at the homes of the professional carvers have large scale shop equipment and tools such as grinders, drills, band saws, and electrical hand tools. Ducts to collect dust, fans and external venting protect the carvings and the carvers.

I saw the following items made with reindeer horn available to tourists at lower price points: key chains, bottle stoppers, potato testers, buttons, rings, necklaces, game pieces, and jewelry. Horn is also used for loops in the lasso, knives, and game items. The carvers made knives and spoons with reindeer horn, wood

Figure 10.3 Sámi knife, bowl, ladle, oval box and perfume holder carved by Lars Pirak (photo by Aldene Meis Mason)
milking bowls with reindeer horn applied to their handles, and traditional bottles for keeping salt dry.

Figure 10.4 Sámi carver's workshop next to home (photo by Aldene Meis Mason)

Carvers are willing to try new techniques and designs. JR showed me items from his display case including an oval salt container by the famous Sámi carver, Lars Pirak, and inspired by the Arctic grouse. JS thought using digital design would allow him to get the lids to exactly fit oval and round shaped bowls.

Young Sámi students are taught carving in high school. At the Sámi post-secondary institute, the carving students learn to use traditional tools, high speed industrial shop equipment and electrical hand tools to cut, lath and polish reindeer horn and wood. JR commented, “Students have a band saw, sander, and grinder. So they do not owe so much money, they do not need more equipment for a small shop.” Their instructor said, “You need to be very careful with your hands. That is the only way you make a living […]. When you are out in nature, the older people are telling the younger ones to be careful.” They also study small business management as part of their program.
Sámi women working with reindeer leather produce bags, pouches, belts, shoes and clothing. The seamstresses also create traditional clothes for the Sámi people. JC commented, “The clothes are about your identity, where you are from, and your heritage. We can tell directly from the clothes where somebody is from.”

When sewing the traditional clothes, such as shoes, they use reindeer sinew as thread. Sewing by machine may be necessary for some things but the patterns and shapes are still the same. They still do the embroidery by hand on traditional items (JC). They also use traditional materials and methods to create designer fashions. However, several interviewees mentioned combining new colours and fabrics which are not traditionally used by Sámi.

Reindeer leather is made into pouches for coffee, tea or tobacco; purses; belts and wrist bands; clothing such as leggings, gloves/mittens, shoes, jackets, hats, pants, vests; and pictures. JT said, “The Sámi culture is a great inspiration for creating things. The forest and mountains are places to gather energy.”

The Sámi post-secondary institute offers a two year program. Students study Sámi culture and language as well as traditional Sámi designs, materials and techniques. During the second year, they are allowed to design and make new “soft” products. A Sámi teacher mentioned that after graduating, some students have received start up grants from the European Union to buy special sewing machines. The grant covers about half the equipment costs. JC knew some people have received grants, but it is not really widely spread. More women are taking training in the hard crafts (antler and wood) because they will make more income (JR).

Because sewing is very labour intensive, the women find it difficult to get compensated for the value of their time and training (JJ, JK, JL, and JN). JM suggested, “Maybe, men or women think differently. The men think about making a living or a business; the women think it is a cultural area. They learn to make clothing for themselves, their family and their children. Women are the cultural carriers.”
As a result of the low returns for her time, JJ has shifted from clothing production to design. She intends to hire less trained people to make the clothes. JK and JL work full time in a factory to earn an income and make their products at home after-hours. JM commented that the Sámi post-secondary institution had begun offering design courses as part of the “soft” program as there was a big demand.

JT, a Sámi artist, makes pictures about nature. Many of her pictures feature Sámi culture such as reindeer houses, sea, fishes, mountains, forests and the life in the mountains and forests. Her pictures sometimes tell stories about Sámi culture. JT commented, “The Sámi culture is the background.” She also uses Sámi designs, patterns or shapes. Her pictures have dyed reindeer skin, whole or pieces of horn and bone, and pewter as decorations. JT also makes pictures inside the rack of the reindeer horns. About two years ago, she started making jewellery.

JT’s artwork started as a hobby but is now her livelihood. She spends whole days on it. JT mentioned, “It is not so easy to come out to trade, you have to show your work to many people. People must be interested. My pictures take a long time to do so they are expensive and it is not so easy to sell. I offer a range of prices, interests, and different products.” Each year JT tries to change her products by doing the same ideas in different ways. She now uses different colours and fabric than the traditional Sámi ones and combines these in new ways. JT sells her art work in her home shop, on consignment in shops in several towns, and through her web site. JT commented that this way of life was peaceful but did not really provide a safe income.

Sámi hard and soft crafts are sold at local markets around Sweden and through the Sámi Duodji store in Jokkmokk. Some local craftspeople display their work in local Jokkmokk stores and restaurants. Several craftspeople sell their work from home-based studios by appointment or scheduled hours. Some entrepreneurs had developed websites.
10.4.2 **Tourist Service Operators**

The Sámi see tourism as a way of expanding their income beyond reindeer husbandry, hunting, fishing and handicrafts. Several Sámi entrepreneurs indicated that tourism was not new. Their fathers and grandfathers had guided and entertained tourists when they were growing up. They had also come to the mountains to see their reindeer. (JA, JB, JC, JI). Because more tourists are interested in learning about the Sámi, more Sámi are becoming involved in tourism (JD, JI, JK).

JD mentioned that the Swedish Sámi organisation had started a tourism project to see how they could work together for all of Sweden in areas like common marketing. According to JD, the government has been introducing more regulation, standards and certification. For example, tourism operators are required to post a bond as security. This requires a large investment. They also have to provide clients with commercially prepared food. For example, an operator cannot take fresh caught fish and feed it to the tourists. There are also standards for water and hygiene. Jokkmokk has recently offered a training and certification program which some Sámi participated in. The Sámi are forming enterprises and offering packages which combined exposure to aspects of reindeer herding and introducing more culture.

**Accommodations**

A Sámi family owns and operates the Hotel Gastis which is one of two hotels in Jokkmokk. The hotel, built in 1789, used to be the centre for the Sámi trading. Three generations have run this small hotel which has 26 sleeping rooms, a conference room, bar, and dining room.

Several Sámi in the Jokkmokk area offer tourists the opportunity to stay in their homes, at nearby farms, or in cabins in the mountains. JI learned and read about Sámi culture so she could tell stories to the tourists. Some Sámi reindeer herders allow tourists to stay with or visit them. They offer storytelling, sleeping in traditional tents, experiencing the reindeer herding life, eating traditional Sámi foods, and guiding in the mountains. They mentioned the reindeer were still the
priority and they had to fit this in around the reindeer activities. JD commented that it was hard to maintain privacy while having tourists.

Restaurant

JQ, the owner of a well known Sámi restaurant, was previously employed in health care. She started the restaurant because their family were members of the Sirges sameby and had reindeer. Her family’s herd supplied the restaurant with the reindeer meat and other products. JQ said, “This is one of the few Sámi restaurants in the Scandinavian Arctic.

The restaurant is co-located with the Åjtte Swedish Mountain and Sámi Museum. JQ mentioned, “The equipment and furnishings are owned but the space is rented from the museum.” The restaurant has operated for more than 20 years. The walls are covered with large poster murals featuring bright Sámi colours and handicrafts (see Figure 10.7). The tables and chairs were wooden. According to JQ, “It is important to involve all the different families from different regions - the North Sámi, the Lulea Sámi, and the South Sámi. They are one people that live in all these different places. She has tried to bring it all together.”

The menu offers many different reindeer and traditional Sámi foods made from local forest and mountain produce. The family smokes, salts or dries the reindeer and fish themselves. Berries are picked locally. JQ mentioned that people from China were picking the berries and this was affecting their availability. The menu includes sliced reindeer meat in sandwiches, sliced reindeer meat with potatoes, suoves (salted, smoked, and fried reindeer meat), and chopped reindeer meat. Other items include fish (like char and reddsing) and freshly baked Sámi “gåhkko” bread. JQ chose these items because Sámi ate these at home and they were quite easy to prepare. For special occasions, they use the blood and all the different reindeer parts. JQ added, “When you cook the meat to make the blood dumplings for the bouillon, it is really good.”
Since the restaurant began, JQ has partnered and cooperated with some of Sweden’s leading chefs. The enterprise offers a total cultural package. For evening meals, the restaurant has themes, decorations, and cultural programs. JQ’s sons are active reindeer herders so they tell stories. They also have the tourists come to see their reindeer herding activities up in the mountains. JQ elaborated, “For the bear, they would have the joik, [the traditional music and singing of reindeer herders]. You would eat the first food through the brass ring and talk about the old culture and the tradition.” As her sons grew up, they played a bigger role in the business. They assist during busy times and the Jokkmokk market and help with the cultural programs. The restaurant has received the Swedish Academy of Gastronomy Award and was recognised by White’s Guide as one of the 260 best restaurants in Sweden. Recently, JQ volunteered as an advisor with the Sámi post-secondary institute for the new Sámi culinary arts program. She has also written about how to operate a restaurant.
**Jokkmokk Market**

The annual Jokkmokk Market is very old. Some people said it had been held for about 400 years. Approximately 30,000 to 40,000 people visit the winter market during February annually. Many people in Jokkmokk mentioned its positive impact on the economy. In conjunction with the market, several Sámi families offer bed and breakfast arrangements.

The Jokkmokk Market features traditional Sámi dressed in costumes, craftspeople, a festival, ice tents, traditional storytelling and Sámi joiking, reindeer pulling sleds for the tourists and reindeer racing. A Sámi Elder with a white reindeer leads the daily parades. This image has been used in the logo associated with the market (see Figure 10.6).

![Figure 10.6 Logo for the Jokkmokk Market (photo by Aldene Meis Mason)](image)

According to JD, “Sámi were not involved in the market’s commercial development to bring more tourists to the community. This was more driven by the municipality than the Sámi.” JA and JB indicated “Sámi have tried to have food for the guests during the market but it is not easy to have a location. We have Sámi companies that have the Sámi interests. But, the companies involved in the Jokkmokk Market are not Sámi companies.” JV commented that the rental of the buildings as well as the food safety and operating requirements made it difficult for the Sámi to have a food location. Non-Sámi entrepreneurs were selling imitation Sámi handicraft products at the market (JM).

JM mentioned, “Students at the Sámi post-secondary institute had a handicraft centre and exhibition, a café/restaurant, and evening programs during the Jokkmokk Market. A lot of people also came to see the school.”
10.4.3 **Technology Services**

JA and JB’s company, Tanaka AB, is about a year old. The company commercialised technical systems and products for tracking reindeer and cattle. The company also provides related technical consulting services. The two women developed and patented a new product in Sweden for tracking reindeer and cattle. They became interested in information technology solutions which would enable reindeer herding families to stay together throughout the year. Sámi herding is very expensive. Petroleum costs are very high as they move the reindeer between the forests and mountains in trucks and trailers. As the new product costs much less, it would reduce the overall costs of reindeer herding.

They had taken five to six years from product development to the prototype stage. The prototype will be ready for testing on other reindeer in December, 2008.

*JA and JB*: We developed a new product where they place a radio collar on each reindeer and are able to track it and the reindeer herd from the internet. Each reindeer collar is individual. Other collars are not the same. The collars with GPS, GSM and satellite are too expensive. You cannot put a collar on every reindeer. That is why we are developing a new, much cheaper technology. With this new system, the Sámi reindeer herder will be able to go in the computer and check from day to day where the reindeer are moving. They will not need to drive around all day on the snowmobiles in the winter looking for the reindeer.

The women have received little financial support from the government or the local community. “It has been our own money and time going into it.”

They had worked with the Sámi Network Connectivity Project for four or five years to bring internet access up to the mountain reindeer grazing areas. During some seasons, male and female reindeer herders were up in the mountains while their families remained in Jokkmokk. The children were in school and the women worked as nurses, teachers or health care providers. They felt this project would keep the families connected. JA and JB commented, “Reindeer herding history has been the same for 100 years. Now we are taking this technology to do something new.” They added, “Some Sámi people laugh at us and say we do not need that. Because they have been so assimilated by the Swedish society, they
cannot see the value of going back to our old culture and being a whole family. So they have lost something.”

10.5 **Sámi Reindeer Meat Processors**

According to the Swedish Ministry of Agriculture, Food and Consumer Affairs about 1,500 tonnes of reindeer meat are produced every year in Sweden. Not many reindeer herders in Sweden process their own reindeer meat for sale. Most sell the live reindeer to buyers waiting behind the corral gate at the separation. These buyers would then process the meat into sausages, fast food and dried meat.

The Sámi in Jokkmokk do not have a community owned processing facility to sell the reindeer. However, some Sámi process reindeer to create meat products. Interviewees mentioned Heita Europe Mealt Poulen, the Utsi Brothers in Poreus, Helena Lenta, Lila Spik, and John Karolik. However, none did large scale processing.

Several *sameby* have created a large cooperative slaughter house and meat processing facility, Renomera, located in Avidsjaur, Sweden. It processes and sells reindeer and moose meat products. According to their website, Renomera’s products include reindeer meat, steak, topside, shoulder, entrecôte, boneless, saddle, tenderloin, heart, liver, blood of reindeer, smoked reindeer, dried reindeer meat, minced meat, striploin, sliced, and half moose. Renomera declined the invitation to participate in my research.

JG is a reindeer owner. JG and his four brothers have a small reindeer processing facility with an adjacent retail store. The family herds reindeer for the four brothers and two others. According to JG, “The Sámi always have known how to slaughter, select and cut the meat. Traditionally, the Sámi killed the reindeer with a knife. Today, it is no longer permitted and you need a special knife.” Some Sámi reindeer herders use a special slaughter gun with a metal rod (not bullets) similar to that used for cattle. JG’s facility sources mainly from their private reindeer but they also buy meat. Normally, other people do not bring their reindeer in for processing.
Traditionally Sámi cooperated and worked together to survive. Sámi still work together and share the responsibilities. JG explained, “With the four brothers, perhaps two would work with the herding and two would work in the facility. So Sámi from history, you have to cooperate and help each other otherwise you could not survive.” I watched his brothers and nephews work together cutting up reindeer in the processing area.

JG makes meat products like thinly sliced reindeer to fry (a very common Sámi dish). They also make smoked meat products. They sell the horns and the skin but the bones are waste and go into the garbage. JG added, “The good reindeer horns are sold to local Sámi craftsmen. The lesser quality and smaller horns we sell to other people who make things from horn such as cheese cutters and smaller lower quality things. Before the Japanese bought large amounts of reindeer horns for potency medicines but they are not doing this anymore.”

Traditionally the Sámi slaughtered and roughly cut up the reindeer. They wouldn’t care about the parts (JG). Now when local people send their reindeer for processing or purchase reindeer product from the store, they want better processing and special products. The hygiene and food safety regulations have also increased.

JG: When people order or buy the meat, they want special products. Now we have to process according to the government standards. Traditionally, when the Sámi slaughtered they would do it more roughly as it didn’t matter. Now there are many different parts [and cuts]. For example, the inner part of the fillet is a smaller piece and very expensive.

There are many different kinds of fat from the reindeer and these contribute to good health (JG). Reindeer fat is served as a delicacy during the Sámi cultural nights held at the restaurant (JQ). According to JG, “Meat of a fat reindeer is a lot better than the meat of one who isn’t. Even if you took away the fat from the meat, it is still a higher quality meat because it is a healthier animal.”

Reindeer skins are mainly exported to Finland and eastern Sweden (JG). In the region close to Finland, there is a very famous tanning industry. A factory in Kero exports tanned reindeer skin to Japan and England and sews exclusive
reindeer products. Reindeer skins are readily available to tourists in the stores for about 175 Euro. JG also sells some skins to a Sámi who naturally tans and dyes these using traditional techniques. He uses no chemicals. These are sold to local Sámi making traditional Sámi clothing and handicrafts (JJ, JT).

JG commented that in the old times, Sámi slaughtered reindeer outside in the winter after the gathering and separation. JG added, “Now you have to transport the reindeer 20 or 30 kilometers, put them in another corral, and then slaughter them. Germs live in the big facilities. The quality goes down as the animal is transported.” Reindeer meat processing has become more difficult with increasing government regulations, bureaucracy and hygiene standards. Meeting these changes has required large investments to upgrade the facilities and equipment.

JG: You have yearly government inspections that cost about 10,000 kronor and you have to maintain a certificate. You need letters from the doctors saying your hands are in good shape. You have to get the license once every year. The standards are really high now for what you need in your facilities. The meat has to be kept at about 12 degrees. The fridge, the freezer, the place where you do the actual cutting – they all have to be kept at that temperature. We have made all those big investments.”

JM mentioned, “The larger EU certified slaughter is very fast and they do two hundred to four hundred reindeer every day. As it is a problem to take the skins from the legs, this is resulting in a shortage of material for the handicraft.”

A new labelling program is being introduced. According to JA and JB, “Now they are working on a special sign that you can put on your meat to tell them it is pure Swedish reindeer.”

Some meat processors are selling directly to the public at markets using customized vans (see Figure 10.7).
10.6 Barriers to Sámi Enterprise

Reindeer herders are finding it more difficult to enter and remain in business. There is not enough grazing land for everybody to do this because these lands have been exploited and destroyed by the different intrusions. Conflicts about land and water rights are another aspect of this problem.

Reindeer herding has become very expensive. Costs have increased for gas, helicopters, ATVS, trucks, and even food for the reindeer. Trucks increasingly are used to transport reindeer because of poor grazing conditions, preserving reindeer strength, and crossing private lands increasingly owned by tourists, forestry, and transportation companies (JC, JE, JF).

_JF_: More Sámi are transporting reindeer for speed with cars and trailers. Not because the reindeer herders are lazy, the ice is not good enough. There are many forestry cuttings so it is not so easy to move on land. It is easier to transport with the cars. But, this is not in every place. This is mostly in the South.”
With climate change, the Sámi are experiencing very mild winters. The surface of the ground is melting and freezing so the animals are having difficulty crossing the ice. A pole with a carved spoon attached to the end is used by the reindeer herder to break though snow and ice so the reindeer could feed (JS & JH). When the animals cannot find enough food, the reindeer herders are feeding them with pellets and hay. They also feed the reindeer lichens which they have picked or imported from Finland (JF).

Interviewees also mentioned reindeer herding is being interfered with by dams, waterpower, logging companies and private owners depleting forests, access roads for tourism, railroads, and mineral prospecting and mining. They mentioned this may be less so in the Jokkmokk area than other regions because a lot of the mountains are protected in the national park. Inventorying and keeping old forests is important because the reindeer eat the lichens and mushrooms which flourish there. JS discussed the impact of Chernobyl and its effects on the lands, animals, and horns. His reindeer antlers were tested for radiation.

Several Sámi have been told by government officials that they could not have new enterprises as it was against the law for reindeer herders. In response to Sámi requests, this legislation is currently under review.

Increasing regulatory bureaucracy, regulations and paperwork are adding costs to Sámi enterprises and making it more difficult to operate. Yearly inspections, certification and licenses are costly. This was mentioned with regard to reindeer herding, meat processing, and tourism ventures.

The lack of business knowledge is another barrier. Several Sámi entrepreneurs indicated they would like to have business mentors. To help address the lack of business knowledge, the Sámi post-secondary institute now includes accounting and finance courses in all the two year programs. Reindeer herding is also offered as a distance program over the internet one week per month so the reindeer herders can still participate while in the mountains. As part of their program, the reindeer herding students complete business plans and applications for grants and loans.
JD mentioned that in the four week Tourism Certification program, participants wanted to learn more about combining nature and culture, combining economics and finance, running a business, partnering with an existing business, and working with a mentor. The Strukturum also offers several workshops on starting and operating small businesses. Universities have recently begun to offer on-line courses in small business management which Jokkmokk residents are accessing (JD).

It can be difficult to establish a customer base and determine what products will fit the tourists’ price range and interests. Producing art work of various sizes was important not only because of cost but also fitting in their suitcases and vehicles (JT). “There is always a market for traditional things but you must make the market wider (JM).”

Most Sámi people own their home in Jokkmokk (JA, JB). They had borrowed money from the bank to pay for it. The savings built up from home ownership is often used as collateral when starting up other businesses. Several of the Sámi interviewees have their enterprises located in their homes or in an adjacent building. According to the interviewees, the municipality did not require a special permit for a home based business. However, there are regulations for processing or serving food in the home.

JM: “It is tough today to be a small business person. They don’t learn at home to be a small business person. At the post-secondary institute we teach the students economics, law, and practical aspects of running the business.”

Several Sámi mentioned the difficult in starting up companies as the banks did not want to provide loans. Although some grants are available some Sámi were not aware of these and did not know how to complete the forms. JC indicated that few Sámi actually received grants.

A big problem for the handicraft and furniture industry is finding the right wood and then drying it to the right humidity (JR. JT). It usually takes about three years and destroys a lot of wood.
An issue for the *duodji* is the protection of intellectual property as the Chinese and non-Sámi in Sweden are making imitations (JM). These Chinese imports are available but the quality is so bad one could tell the difference (JR). However, the Chinese imports are much cheaper to buy than the Swedish Sámi products.

10.7 **Sámi Measures of Enterprise Success**

**Profit**

*JG:* It used to be before that profit was not important. You just needed to make a living by doing reindeer herding to survive. You did the work you wanted to do with the reindeer. Now with more young people there is more economics in the business.

A reindeer herder measures success by being “able to live off reindeer and reindeer herding (JC)” Before, success was measured by how many animals were in the reindeer herd. JE added, “Of course if they have many reindeers, it is a success. It is like money.” An important Sámi saying is, “You have to have reindeer luck.” However, it is not appropriate to ask how many reindeer a herder owns. (JA, JC, JG, JE, JU).

JC commented, “In Sweden and in the world there is maximum of profit the company wants to achieve. The Sámi thinking is not like that. Now more of this is coming. You need to make a profit because you need money to survive.” Young people have recognised that to be profitable a certain number of reindeer must be sold (JC, JE, and JF).

To assist with profitability, the government has established guidelines for the number of reindeer a *sameby* and reindeer herder should have.

*JG:* The local regional government has put the number up to 500 reindeer for you to live off reindeer husbandry. If you had less, you would need another job on the side. These are only guidelines. They also limit the number of reindeer that can be in any one *sameby*. For example, if there are 4 reindeer herders and the *sameby* has 2000 reindeers that would be 500 for every person. […] There is a roof limit for how many reindeer every *sameby* can have and they expect the *sameby* to divide that up for each individual person.
The Swedish government provides a grant to the reindeer herders for each kilo of reindeer meat sold. Public pressure has been increasing to reduce or eliminate these grants. Other farmers also receive grants so the Sámi are concerned they will be treated unfairly.

*JC:* A lot of debate has been in the media about how the reindeer industry is living off grants. The grant for the meat [to the reindeer herders] would be 45 to 50 million SEK a year while just for the farmers in Northern Sweden [the grants] would be about 3 billion. The grant paid to reindeer herders varies for different countries. […] So in equality if reindeer herders should live without grants from the EU, other farmers should also. But the farmers have a lot of power in the EU. For example there are big demonstrations by the farmers in France about these issues.

Tracking reindeer performance and selective breeding have become important strategies to improve productivity, efficiency and profitability. Other measures of success which impact on profitability in reindeer herding include access to suitable grazing and water, good and healthy reindeer, better mother cows, big bulls with bigger antlers, well trained dogs and a good wife as a helper.

*JE:* A very good reindeer cow has a calf every year and is good at protecting her calves. If the calf survives the winter, that is very good. An average cow will give a calf for 15 years. They have quite a long life, about 20 years. In some sameby communities, they have individually marked the cows and see how they have done for calves. They weigh the calves and do ongoing research.

For the meat processing, JG said “You can’t compare it with the reindeer herding. The processing part is run as any company in Sweden. You have to make profit to be able to pay the employee wages.” A start-up grant made it possible for him to enter the reindeer meat processing businesses which cost “millions of kronor.” Some of the grant was written off but most had to be repaid. JG added, “In this business, it is important that you learn everything. Everything you cannot do costs you money. His family does a lot of work themselves so they do not have to pay employees.”

To sustain their families, Sámi have tried to bring in income from other sources such as home stays, guiding, and making *duodji*. Sámi entrepreneurs have a
strong focus on product and production to make a profit. Many identified using new methods and equipment to produce items more quickly. However, maintaining quality remains very important. Start up grants from the European Union are available to help entrepreneurs purchase machinery and equipment (JJ).

JM took the author to observe the Sámi students learning carving at the Sámi Post-Secondary institution learning to use not only traditional tools but also cutting, lathe and polishing the horn using high speed industrial shop equipment and electrical hand tools. JH, JM, and JR showed the author their carving studios at their homes. The carvers had large scale shop equipment and tools, ducts for dust collection, fans, and external venting.

Becoming too profitable in an enterprise may be resented by others. JA and JB added, “If you get too much profit and there are people around who do not get profit, they ask ‘Why is he doing this and that?’ Some of them do not believe themselves that they can do this. They talk a lot about that.” JR commented, “Everybody is jealous when you make money from reindeer herding and handicrafts. You always have people who do not like you. But you need to earn money to make a good living for you and your family.”

**Broader Measures of Success**

Other measures of success included quality of life, self-fulfillment, well-being, sense of achievement, pride in one’s work and performance. The Sami must be wise stewards of their environment. It was essential for Sámi enterprise to hire other Sámi from the community. Giving back was also important.

With regard to the new types of Sámi enterprise, JA & JB commented: “It is a new generation. If we can be successful we need to show others so we can be role models. We need people who are Sámi who have been successful.” Several Sámi commented that they acted as advisors for the Sámi post-secondary institute in program development. To facilitate new businesses, the *Strukturum* also offered a network of women businesses.
10.8 Sámi Cultural Resilience and Change

Language & Culture

*JM:* It is important to be proud of your culture and your person. Now it is positive to be a Sámi in Sweden and Norway. If you go back 30 or 40 years it was another situation. In the 1950s, Sámi children were forbidden to talk Sámi at school. If they were parents in the 1960s and they thought they wanted their children to have a good life, they tried to incorporate them into the Swedish life. They did not call them Sámi and they did not speak the language. Today, a lot of people born in the 1960s and 1970s are very strong and as parents they want their children to learn Sámi even though they can’t speak it themselves. They are very motivated to learn Sámi and to work with their children.

Retention of the Sámi language declined in the 1950s and 60s. Sámi were forbidden to use it in school and parents often did not speak it at home. Today, the Sámi now desire to preserve their identity and their language.

Sámi language plays an important role in preserving the Sámi culture. JE commented, “Much of the traditional knowledge is the language. The language is very important. The people working with handicraft, reindeer herding and living up here, they use Sámi terms about things they are working with even if they don’t talk Sámi.”

*JE:* In the Sámi language about 300 [Sámi] words are about the snow: to move on it, to dig it, to graze it. Here we have snow 9 or 10 months. If you describe reindeer, you have different Sámi words for the antler and colour. Also in the Sámi language, you can have different names for different places - like the tree line where the trees stop growing. Every place has a name. If you ask some older Sámi, they have these old place names. Everyone knows what it looks like. The name is like a map.

Community names today are frequently in Swedish or Finnish on maps. Attempts to restore the Sámi traditional names meet resistance because the tourists do not understand them.

As Sámi have been a minority in Sweden, their culture has experienced very large pressures. Sámi are concerned the traditional knowledge is disappearing very quickly. A lot of traditional knowledge is not written on paper; the Elders held this knowledge. The older people are passing on. The old knowledge is not transferring to young Sámi. JJ: “Many of the young reindeer herders have lost
the old memories how should we get over the river in this way. They do not have the old knowledge.”

JI: I don’t know why others have lost it. I know why we kept it. My parents and grandparents have been very good to tell us about the old reindeer herding. Not always are others listening to the old ones. You think they are going to live always so they are not asking questions. One day, they are dead and you cannot ask them then.

The special Sámi elementary school and the Sámi post-secondary institute in Jokkmokk have helped to preserve and restore the culture, language and traditions. Similar post-secondary institutions about Sámi hard and soft handicrafts and reindeer husbandry are available in Norway and Finland. The institution in Jokkmokk is well known and offers high quality programs (JR). “It is unique. Students are drawn from Norway, Finland and Russia. There is a Sámi university in Norway and the University of Umeå” (JM).

JM: The mission of the Sámi post-secondary institute is to keep this knowledge and teach our young people this knowledge. As Sámi is the minority it is very important to come, be safe, stay, study and take back some of the samples to the communities. It can be handicraft, languages, reindeer, or Sámi traditional food courses.

Young people at the Sámi post secondary institution study the Sámi language and culture in the first year. JR commented, “They talk a lot about tradition and what was real and what was stories to make people not do certain things.” He noted, “Sámi traditions and culture varied in different Sámi areas. In different parts of northern Europe, they used different names and techniques in the production of similar items.” JK and JL, previous students at the institute, found being exposed to the different aspects of Sámi culture and traditions was very valuable.

JD commented that several of the Sámi who had become involved in tourism “were very interested in seeing how reindeer herding really worked fifty years ago. They started to use the old products and to do the herding in the old ways […]. They had become much more aware of their history.”

JW at the Sámeportalen showed me the magazine they produced for the young Sámi to interest them in the Sámi language culture and traditional knowledge.
Protecting Knowledge

One way of protecting Sámi knowledge has been to ensure some traditional products were made and sold only to Sámi. The seamstresses said that Sámi kolte [traditional Sámi clothing] should not be sold to non-Sámi. JJ added, “You would not make the whole outfit. The shoes or the belt would be acceptable for non-Sámi.” One interviewee told about a non-Sámi woman walking at the Jokkmokk Market wearing a Sámi boy’s hat. “It was inappropiate that someone had sold this to her.”

While JI provided Sámi home stays for tourists, she shared stories about the Sámi culture. JI commented, “I had checked with the older Sámi about what I could tell. Some secrets I keep. For example, I don’t tell where we keep the sacrifices. They need to be at peace.” JA and JB added, “When you have tourists visiting, you do not tell everything. Some things you keep for your own. Your knowledge can be your bank. You cannot tell people how you think.”

Taking and copying traditional items has become a problem. JM commented, “A lot of non-Sámi are making the handicraft that is very good quality. They are starting to sell them in the market and that is a problem. It has a history, culture and value that must be protected. The Sámi Duodji tries to mark handicraft so everyone knows it is Sámi made. Not everyone is using the mark, but some do. Less expensive Chinese imitations of Sámi traditional products are also being sold in Sweden.

Elder Knowledge

Sámi Elders are respected for their experience and knowledge. JA commented, “In the meetings they would be there to give advice. Even if they are not active in the reindeer herding, they would still come to the gathering.” JC added, “Especially in the reindeer business, the knowledge from the Sámi Elders is above all value.” JE said, “I think it is in the Sámi culture to have respect for all the people and to listen to them. At the Sámi reindeer gathering and separation I attended, the oldest Sámi man told everybody what he thought they should do. No one complained or argued.”
Several Sámi interviewees said they would ask the elders for advice about their enterprises. JK and JL mentioned for the traditional clothes; JI, for the stories and knowledge that could be shared. However, the Sámi knowledge of the elders may not be as useful for the newer enterprises. JA and JB commented, “It is different if we talk about reindeer herding or if we are talking about tourism. For reindeer herding, one must have old knowledge. Tourism is a new company product. People have to learn from schools and other people.”

Elders also act as advisors to the Sámi Post-Secondary Institute. Recently it had attempted to bridge the Elders with the traditional knowledge with academics and scientists.

JR: The Sámi post secondary institute had cooperated with the researchers at the university in Lulea and offered a seminar to bring scientists, reindeer workers and elders together. The elders have a lot of knowledge about a lot of things that is not making its way to the university.

Traditional Processes and New Technology

Reindeer herding increasingly uses technology. According to JC, “When I was five or six years old, the first things started to come only very few used them sometimes when they couldn’t find the reindeer ox they would move their whole family.” Today, they use 4 wheel vehicles, snowmobiles, GPS, radio collars for tracking, satellite phones, cell phones, and computers and even immunise the reindeer.

How did the Sámi feel about new things that were being produced from reindeer but were not made using the old ways? JC commented, “There has been development within the machines. It would take too much time to do it by hand, especially with the hard crafts. Also, the sewing by machine is necessary for some things. But the patterns and the shapes would be the same […]. They still do the engraving and embroidery by hand.” JR, a carver, indicated that he could see using computer assisted drawings to ensure the fit but the rest of the product would still need to be made with traditional processes.
The young people going to the Sámi post-secondary institute learned the Sámi culture and traditional processes in the first year. For example, the Sámi combined both functionality and beauty to the eye and to feel (JR). Butter in the wooden bowl will not melt even if it is 30 degrees out (JR). The students also learn the “old ways”. For example, JR mentioned the influence of the moon in our world. “You should not take the material when the moon is falling because it will have more cracks. Only take material from the woods when the moon is rising.” In the second year, the students use these fundamentals to experiment and develop new products and processes. The students also receive training occupational health and safety.

**Decision Making**

Sámi use consultation and consensus to make decisions. JE elaborated, “This is very big in Sirges and with reindeer owners [...] They want to be friends with each other. They take the time to discuss matters through. It is also why many new things take a lot of time to implement because the discussions take so long. If someone disagrees, that can slow everything down.” JG added, “[In] reindeer herding, everybody has to have a consensus or it would be a catastrophe. It would not work without everybody agreeing. Of course, somebody has to come with a proposition or a suggestion to let us do it this way, but then everybody has to agree.”

The *sameby* makes some decisions as a whole with all the reindeer herders such as the timing for the gatherings. However, JC indicated at some instances when they can’t reach a decision through consensus, they vote. JF commented, “There is a special voting system where you get one vote per 100 reindeer. If you have a lot of reindeer, you get more votes. This may not always be good.” JC elaborated, “At a yearly meeting when they make a budget and other questions then they would have a vote.”

Several Sámi commented that using consensus to make decisions could slow the innovation of new products and processes. JC suggested this could be good though as everyone then understood the situation. On the other hand,
JR: “Very often we have to listen to the person who doesn’t want to do it. And that person makes the decision. Very often we have that person working in behind. You always have one that says do not go. We move very slowly to go forward. It takes a lot of time before getting started with a new project.”

I was told decision making by consensus could also vary from family to family. JA and JB added, “In some families, the oldest people or the Chief make all the decisions.”

**Value – Not To Waste**

The Sámi do not waste. JR elaborated, “In Sámi culture, you don’t throw anything away. You can use it. There can be rough times when you can use it.” Even in their modern operations, they still try to use or recycle everything. JC explained, “Before you would use all parts of the reindeer: skin for the cloths, meat, antlers and shoes for everyday tools. We didn’t throw anything away at all. We even cleaned the stomach and intestines.” He added, “This is true now with modern materials. For example, the band [track] on the snowmobile is used as a ramp to load the reindeers so they would not slip.”

JG commented, “You used to take care of everything. Privately we use all the parts. When we slaughter in the facility, we try to make the most of everything. We do not sell the bone, it goes into the garbage.”

JI uses the ear notches from the marking the reindeer in her necklaces, bracelets and earrings. The clothing producers use leather cuttings to make smaller pouches for holding sewing items, tea and coffee, necklaces and wristbands. JJ tries to use the whole skin in her clothing designs. For example, “When slaughtering you take the belting from the forehead. You make shoes with it.”

**World View**

According to JC, “the Sámi have a more circular view of the world, where as the Swedish have a more linear view”. The reindeer is also seen as an intelligent being. Generations are interconnected and ancestors are important. Spirits guard and protect the homes, land, forest and animals (JI, JR).
Adaptability and Innovation

The Sámi people are adaptable and willing to try new things and ideas to survive and to change.

JD: If we think about the Sámi people, reindeer herding is one thing that Sámi people used to do. Some Sámi don’t think this is so central now because there are not so many Sámi who are reindeer herders. Only 10% of the Swedish Sámi people are reindeer herders. Some people think that other things are as important like the language, handicraft, fishing and hunting. Some are also talking about agriculture.

Sámi have demonstrated their resilience. They have been forced to resettle and adapted. They have made ecological adaptations by controlling overgrazing, providing the reindeer with winter food, and controlling reindeer predators (JF). In adapting to the changing economy, they have created elementary and post-secondary schools, invested in distance education and web-based for reindeer herders, and invested in new transportation systems like trucks and helicopters. They also participated in the trial of a new Sámi internet communication system.

Several interviewees mentioned that Sámi are concerned about their future. “Something is changing. Before, it was status to be a reindeer herder. If the economics do not change you can look at them like losers” (JA & JB). They are faced with questions like: What do Sámi people need? Is that good for us? Will there be reindeer herding as a livelihood for families in the future?

JA & JB: We need more money than we did before… We have a lot of disturbance here with the forestry so in ten years we may not have food for our reindeers. A lot of tourists want to come in our land and disturb the reindeers. Maybe there is more money to work with the tourists than being reindeer herders.

Several Sámi commented that if the reindeer herders focus on producing meat, they need more reindeer. Bigger operations could result in loss of the Sámi culture.

JA and JB: In our village, do we want to produce meat or do we want to produce culture? These are two big questions. They cannot every time go hand in hand. If you produce only meat, then you need more reindeers. You lose the culture. You think like a business person. Lose your family
maybe [...] Work, work, work very hard. You have lost a lot of things if you only produce meat.

To strengthen their position, the sameby are working more closely together (JC). They formed the Swedish Sámi Reindeer Herders Association. Creating the Sámeportalen enables them to share knowledge and present a common front. The Sámi Parliament has also been formed to unite the Sámi voice and provide for consultation, decision making, and self-governance.

10.9 Learning from Others

Interviewees asked me questions such as:

- “How am I able to do this very different and difficult research in another land and in another language?
- “What other Indigenous people had I studied in other parts of the world?”
- “Who are the Inuit?
- “Did the First Nations and Inuit in Canada have any land claim settlements?”
- “What are land claim settlements?”
- “How are Inuit and First Nations women treated?”
- “Were Inuit and First Nations people experiencing the impacts of the mining and forestry companies?”
- “What about the relationship of First Nations and Inuit people with a particular mining company?”
- “Did the Indigenous people in Canada have the right to stop the mining, forestry and hydro power companies?”
- “It can be difficult to find reindeer meat to buy in different parts of Sweden, are you able to buy caribou meat in different parts of Canada?”

10.10 Conclusion

Sámi in Jokkmokk had experienced much change during the past few decades. Traditional Sámi reindeer herding had been facing serious threats as technology
had made it more expensive and industrial development impacted on the migration and grazing areas.

The key points that were identified as a result of discussions with Sámi in Jokkmokk are as follows:

- Sámi in Jokkmokk herded reindeer but did not hunt them. The reindeer were owned and considered a transferable asset. Reindeer herding was a traditional lifestyle and included fishing, hunting, gathering and handicraft production.
- Only Sámi by law were allowed to herd reindeer. Non- Sámi could own reindeer but the reindeer had to be raised and herded by a Sámi.
- Sámi reindeer herding was a business. The maximum number of reindeer within a sameby and owned by the reindeer herder was set by the government. The reindeer herder reported income, expenses and profit annually to the government and paid taxes. Reindeer consumed by the herder and his family were factored into the profitability. The reindeer industry received government subsidies and start-up grants. Sámi reindeer herding faced competition from other countries.
- Sámi were involved in the formal economy as their enterprises had to be registered. Activities connected to reindeer included meat processing; tanning; designing and making clothing and handicrafts; jewelry-making; carving; providing tourism services such as accommodation, reindeer activities, and restaurants; and information technology communication services.
- Barriers to Sámi enterprise included Sámi culture, lack of business knowledge, increasing costs, lack of start-up and operating finances from banks, and increasing regulatory demands.
- Most Sámi enterprises were lifestyle based. They were necessity entrepreneurs as the income assisted in supporting their families.
- Measures of success included the number of reindeer and their productive capability, profitability, not being greedy, supporting the
community, employing local people, and using and building on their skills.

- The Sámi adapted and innovated within their enterprises and industries. They were concerned about the Elders transferring traditional Sámi knowledge to the young people as these were important survival skills.

- Impacts of Sámi culture were seen in opportunity recognition, processes, products, consensus decision making, protected knowledge sharing, elder involvement, and success measures.

- Sámi felt that the future of reindeer herding was uncertain because of the lack of profitability, increasing government regulation, and technological impacts.
11 Discussion

In Chapter 11, I will compare the cases from the Canadian Inuit and Swedish Sámi sites using the contextual settings and themes; create generalisations; and link my findings with selected Indigenous entrepreneurship literature.

11.1 Indigenous Peoples

As discussed in Section 2.1, I adopted an operational definition of Indigenous peoples which included: 1) descendants from groups present in a region before the arrival of colonisers; 2) who self-identify and identify others as belonging to a distinct cultural group that is a non-dominant segment of society; 3) who maintain cultural and social identity which may or may not have a distinct language; and 4) who have historical continuity and a unique attachment to the traditional habitats, lifestyles and ancestral territories.

Table 11.1 Definition of Indigenous Peoples

<table>
<thead>
<tr>
<th>Sites</th>
<th>Canadian Inuit</th>
<th>Swedish Sámi</th>
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</thead>
<tbody>
<tr>
<td>Descendents</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Colonised</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Distinct cultural group</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-dominant/Minority</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cultural &amp; Social identity</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Distinct Language</td>
<td>High retention</td>
<td>High retention</td>
</tr>
<tr>
<td>Historical continuity</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Unique attachment</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Canadian Inuit are not homogenous but like other social groupings are the product of diverse histories, environments, languages and culture. Inuit in each community studied spoke Inuktitut. Although they used different dialects, they could understand each other. With the formation of Nunavut, Inuktitut became recognised as its official language, along with English and French. In Rankin Inlet and Coral Harbour, it is the official language (They can choose whether to learn English or French in school as a second language). In Inukjuak, it is primary language, French is the official language of Quebec and English is not widely understood although it is taught in the schools. In Happy Valley-Goose Bay English is the official language. Many Labrador Inuit, particular in the south, do not know Inuktitut. Preserving Inuktitut aided in the preservation of Inuit culture; but reinforced a separation from the rest of Canada.

The official main language of Sweden is Swedish. However, Sami is recognised as a minority language and approximately 9,000 are Sami-language speakers.

In the communities I studied, the older Canadian Inuit and the Swedish Sami all had experienced punishment when their Indigenous language had been spoken at school. In each Canadian Inuit community, they had attended a local school up to Grade 8 since the 1950s and were able to live at home. This had helped to preserve their language and culture. The Swedish Sami had experienced much more loss of the Sami language, perhaps because of their closer engagement with the non-Indigenous culture.

Residential school impact was discussed at all the sites – in Canada and Sweden. Children were separated from their families, provided the dominant society’s curriculum which was embedded with its values and beliefs, and punished for using their cultural traditions. These experiences had resulted in losses to their culture, traditional lifestyles, language, and identity. However, several older Inuit in Canada who had attended the residential schools comment that the training had enabled them to get post-secondary education and become leaders in their communities.

Each community, in Canada and Sweden, is preserving and restoring their Indigenous language and culture through their educational system.
The Canadian Inuit lived in their traditional lands – very few had moved to southern Canada. They had suffered domination from English and French Canada. Perhaps because of their remoteness of their communities, the Canadian Inuit I studied in Nunavut, Nunavik and Nunatsiavut have been able to maintain their distinctive cultures. They are the dominant population and there has been little economic development associated with extractive industries. This was less true of those in Happy Valley-Goose Bay and North West River, Nunatsiavut because of the longer and more extensive colonisation, earlier religious interference with their lifestyles, intermarriage, and loss of ancestors due to disease.

The Sámi have been a distinct minority in Sweden, Norway, Finland and Russia as such they have fought to maintain and regain their identity. Changing state boundaries have broken up their ancestral lands, caused forced relocation and interfered with their being a collective people. Loss of identity also occurred by governments redefining the criteria for who was Sámi. The Swedish Sami indicated there was also diversity within Sweden in addition to the diversity found among Sami reindeer herders from other countries. Their histories, environments, language and culture varied.

Both Canadian Inuit and Swedish Sami had experienced loss of identity. The Canadian Inuit showed me the numbers on the leather tags given them for identification. They also had been given English first and last names by government officials and the schools. However, unlike in Sweden, the Canadian census continues to collect information on self-identification as Inuit. Loss of identity also occurred in both Canada and the Sweden when the governments redefined the criteria for who is Inuit and who is Sámi.

**Attachment to Land**

My research found the Canadian Inuit in Nunavut, Nunavik and Nunatsiavut and the Swedish Sámi in Jokkmokk still have strong attachment to their ancestral lands. Traditional lifestyles and subsistence harvesting are very important in Canada. They are protected in Canada through the land claims settlements. However in Sweden, there are no land claim settlements.
The Swedish Sámi right to maintain their traditional reindeer herding livelihood is protected by Swedish legislation. Their traditional lands have been greatly reduced by the state seizing these and selling them to settlers or more recently permitting hydroelectric dams, forestry, and mining. Access to traditional reindeer migratory routes, grazing and water sites have been disrupted. Indigenous reindeer herders in Russia and the Maasai nomadic herders in Africa were experiencing similar issues.

Both Canadian Inuit and Swedish Sámi, like other Indigenous groups in Russia, have been encouraged or forced through the actions of the dominant government to resettle into communities. Some Swedish Sami had been forced to move from Norway. Many Swedish Sámi had moved to urban centers in search of employment. This pattern has also occurred in Greenland.

My findings illustrated how the Inuit and Sámi have undertaken activities to regain control of their ancestral lands and acquire the rights and responsibilities over decision making, use of resources, and external relations as well as ownership of natural resources. Both the Inuit and Sámi have used lobbying, negotiating legislation and memorandums of agreement. However, the Inuit had gained land claim settlements. This reinforced the importance of sovereignty as discussed by Cornell & Kalt (1992) and Begay et al. (2007) among others. Similar to De Bruin and Mataira (2003), my research showed many examples of Indigenous heritage entrepreneurship. A few specific examples are:

- preservation of the rights of Swedish Sámi to be reindeer herders and non-Sámi could own but not herd reindeer and the rights of Inuit to harvest caribou for subsistence (or sustenance) purposes

- negotiation of Inuit land claim settlement agreements and adjustment of their content over time (for example, including caribou in the amendment to the James Bay agreement);

- negotiation with the CFIA to allow Inuit on Southampton Island the right not to corral or pen the caribou during the commercial harvest;
• use of special Inuit and Sámi trademarks to identify and brand their products and services and to protect them from imitation by the non-Indigenous;

• protection of Indigenous culture and Intellectual Property Rights such as appealing to the UN for protection of the Inuit amaauti designs and the requiring that only Inuit carvings could be sold at the 2010 Vancouver Olympics.

My findings also showed how the Inuit controlled research on their lands by requiring special licenses and specifying conditions for consultation, research methodology, and dissemination of research results. Provision for control over research was also in Nunavik’s and Nunatsiavut’s land claim settlements. I was not required to have a special license to do research in Sweden on the Sámi. This illustrates the differences in rights to self-determination and self-governance some Indigenous peoples have gained and exercised.

11.2 Indigenous Entrepreneurship

My findings revealed a variety of Inuit and Sámi bodies engaged in pursuing economic opportunities though formal and informal venture creation and operation related to caribou and reindeer (see Table 11.2). These findings supported work of other researchers such as Hindle. & Lansdowne (2005); Cornell & Kalt (1992); and Bherer et al (1990); Peredo & Anderson (2006); Riseth (2005 & 2006); and Rønning (2007), and Stammler (2005).

Many Canadian Inuit were self-employed from necessity and as a means of survival. Most were not interested in being formally registered – why bother, too costly, too much paper-work and the forms were in English or French.

Canadian Inuit have been encouraged to develop community enterprises by the government and the churches. Each community has had its own cooperative for many years. In Inukjuak, an Inuk entrepreneur had been encouraged by the Inuit government economic development office to form a cooperative for the jewelry
Table 11.2 Inuit and Sámi bodies engaged in economic opportunity related to caribou and reindeer

<table>
<thead>
<tr>
<th></th>
<th>Canadian Inuit</th>
<th>Swedish Sámi</th>
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<tbody>
<tr>
<td></td>
<td>CH</td>
<td>RI</td>
</tr>
<tr>
<td>Individuals</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Families/Clans</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Companies</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Not-For-Profits</td>
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<td>✓</td>
</tr>
<tr>
<td>Community/Village Organisations</td>
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<td>✓</td>
</tr>
<tr>
<td>Birth Right</td>
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<td>✓</td>
</tr>
</tbody>
</table>

Legend: CH (Coral Harbour); RI (Rankin Inlet); I (Inukjuak); HGN (Happy Valley-Goose Bay and North West River); J (Jokkmokk)

making. Earlier his family had been involved in management of the discontinued print making cooperative run through the local co-operative. Each small community had a Hunters and Trappers Association. In Coral Harbour, the Aivitt HTA was responsible for the overall operation of the commercial caribou harvest. There were also subsidiaries of Inuit birth-right organisations, development corporations wholly owned by Inuit associations and territorial and Inuit governments.

Family businesses had also been formed with husbands and wives to take advantage of their Inuit ancestry for designation as Inuit businesses and to receive preferential procurement under the Canadian Government Aboriginal Procurement Policy and preferential northern procurement under the impact and benefit agreements negotiated with developers in the northern economy.

In Rankin Inlet and Coral Harbour, several Inuit families had pooled their money to form Piruqsaijit, an Inuit financial company that controlled much of the real estate in Rankin Inlet, Iqaluit and Baker Lake.

In comparison, the Swedish Sami were either self-employed or had formally registered their small businesses. Each reindeer herder was a registered business which operated within the sameby as dictated by Swedish Law. Although at first one might think these were cooperatives, they were much more. Several sameby
had joined together and invested to form the not-for-profit *Samiportelen*. Several sameby had also chosen to invest in a cooperative which provided economies of scale to process meat and gain access to the reindeer market.

Table 11.3 Non-Inuit and non-Sámi investment and entrepreneurship and government involvement in activities related to caribou and reindeer

<table>
<thead>
<tr>
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<th>Canadian Inuit</th>
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<th>Sámi</th>
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<tbody>
<tr>
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<td>RI</td>
<td>I</td>
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<tr>
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<td>✓</td>
</tr>
<tr>
<td>entrepreneurship</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Federal/Territorial/Provincial</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>sponsored or controlled</td>
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<td></td>
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<tr>
<td>activity involved</td>
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<tr>
<td>• Quota</td>
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<td>✓</td>
</tr>
<tr>
<td>• Inspection</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Legend: CH (Coral Harbour); RI (Rankin Inlet); I (Inukjuak); HGN (Happy Valley-Goose Bay and North West River); J (Jokkmokk)

I also found non-Inuit or non-Sámi investment or entrepreneurship, federally sponsored and controlled activity, or some combination of these involved in the commercialisation of caribou or reindeer (see Table 11.3). For example,

- The Arctic Cooperatives which purchased and marketed caribou carvings globally and also purchased caribou from KAF for their stores in the NWT and Nunavut were owned by the Inuit in the communities. The initial investment to set up the local cooperatives came from the Canadian credit union system.

- Supply was managed by quotas which were determined by the co-management boards in Canada and by the Swedish government, Sámi Parliament and local *samebys*. The harvests and meat processors were government regulated and inspected in Canada and in Sweden.

This reinforced the importance of Sámi and Inuit entrepreneurs developing the skills necessary to build and maintain partnerships and alliances. My findings
supported the suggestions of Peredo and Anderson (2006) and Peredo and McLean (2010).

11.3 Community Context

In Section 11.3, I discuss the comparative impacts of historical development, land size and population, physical infrastructure and remoteness. Language and attachment to land were previously discussed in Section 11.1.

11.3.1 Historical Development

Historical events affect the culture, norms and local institutions and have a significant impact on the development trajectory of a given geographical unit (Nunn, 2009). The study of Indigenous people’s reindeer herding in Russia dramatically illustrates how the state took over privately owned reindeer herds of the Indigenous people. Later with the breakup of Russia, the reindeer stock was returned to individual, cooperative or corporate ownership (Dwyer & Istomin, 2009; Tuisku, 2002, Klokov, 2007).

My findings showed that each Inuit and Sámi community had its own history, values and practices as suggested by Wuttunee, 2004. The Sámi in Sweden had experienced much longer colonisation. Jokkmokk had been a Sámi trading centre for more than 400 years. From an outsider’s perspective, Sámi appeared integrated into the dominant Swedish society. The history of colonisation of the Inuit in Labrador began in the 1700s and was several hundred years longer than that of the Inuit in Nunavut. Although Inuit had settled near trading posts, formation of Inuit communities in Canada’s north has occurred primarily since the 1950s. Rankin Inlet, Nunavut was also different as Inuit voluntarily moved there from other Nunavut and NWT communities to participate in its wage employment. Hence, many its residents came from several different clans. Out-migration from northern Inuit communities to southern Canada was very low.

The Inuit negotiated with the Canadian government for more than 30 years to settle their land claims. The four sites illustrated the time differences along this path. Nunavik was more than 25 years old, Nunavut was in its first five years of
creation and Nunatsiavut was being formed. The four communities also illustrated differences in the impacts of aboriginal, economic and business development policies resulting from Canada’s history and confederated structure. Besides national legislation and rules, there were considerable regional differences. For example, the Canadian government still controlled much of the economic development in Nunavut and the Northwest Territories as they were territories. The Inuit in Nunavut and the Northwest Territories dealt with Indian and Northern Affairs Canada as well as more than twelve federal departments. Nunavik was part of Quebec which has significant provincial autonomy in Canada as a distinct society. The Quebec government has devolved more of its control to the Inuit government of Nunavik and its regional government authorities. Nunatsiavut had been part of Labrador/Newfoundland and its Inuit had minimal involvement with Indian and Northern Affairs Canada’s jurisdiction.

The Swedish Sámi had been affected by the shifts in political boundaries and changing policies of Norway, Finland and Sweden. Some Swedish Sámi had been forced to relocate. Sweden joining the EU had also resulted in changes to economic development and entrepreneurship. Regulations regarding reindeer slaughter, meat processing, and tourism had increased. Competition had increased as reindeer from Norway also had access to Swedish markets. On the other hand, the EU had provided new investment in Sámi entrepreneurship and required Sweden to also increase its investment. My findings were in line with those of Dana and Riseth (2011). The Swedish Sámi did not have a land claim settlement and asked questions to learn more about the impacts of these on the Inuit.

11.3.2 Land Size, Population and Density

In Canada, these small Inuit communities have coastlines of ice and water bounded by rugged rock and low hills. They are above the tree line and the vegetation consisted of low lying plants, grass and moss when the snow and ice melt. None of the communities has a deep water port.

As Table 11.4 shows, there is a lot of land with few people living on it. In fact, most of the Nunavut has just been mapped and surveyed by Canada. Large scale
mineral extraction is just starting with one major operating mine in each of Nunavut, Nunavik and Nunatsiavut.

Their rivers and oceans are among the most unspoiled in the world. With a different lens, it is not quite so pristine. Community members and scientists expressed concerns about the decreasing water quality. Shallow lakes were drying up and pollution contaminants blowing in from the south and in the bird droppings were becoming more concentrated.

Sweden is a quarter the size of Nunavut with three hundred times the population. Norrbotten is the most northern region of Sweden. It has mountains and rivers. Almost 40% of the region is covered with forest and 20% is bare rock, only 1 percent of its area is farmed (GTC Lulea, 2010, p. 8). It consists of Arctic and sub-Arctic zones. The land has been broken up into small parcels for forestry, extraction and farming. Protected areas have been created. Going up into the mountains, I observed the massive flooding for the hydro electric. Sámi spoke about the old growth forests disappearing.

<p>| Table 11.4 Comparative size, population and density |
|---------------------------------|------------|--------------|---------------|</p>
<table>
<thead>
<tr>
<th>Area (km$^2$)</th>
<th>Population</th>
<th>Density (Inhabitants/km$^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>9.98 million</td>
<td>35.16 million</td>
</tr>
<tr>
<td>Nunavut</td>
<td>1.90 million</td>
<td>31,906</td>
</tr>
<tr>
<td>Nunavik</td>
<td>443,685</td>
<td>12,080</td>
</tr>
<tr>
<td>Nunatsiavut</td>
<td>72,500</td>
<td>2,160</td>
</tr>
<tr>
<td>Sweden</td>
<td>449,964</td>
<td>9.59 million</td>
</tr>
<tr>
<td>Norrbotten</td>
<td>98,245</td>
<td>248,421</td>
</tr>
<tr>
<td>New Zealand</td>
<td>268,021</td>
<td>4.47 million</td>
</tr>
</tbody>
</table>
11.3.3 Physical Infrastructure

Physical Infrastructure includes such things as electricity, water, roads, waste disposal, telecommunications, police, trucking, postal services and air freight services. I have included financial services here but will discuss this more in section 11.7.5. Having a dependable physical infrastructure at reasonable costs is important for sustainable entrepreneurship.

Table 11.5 Physical infrastructure

<table>
<thead>
<tr>
<th>Available &amp; affordable business space</th>
<th>Canadian Inuit</th>
<th>Swedish Sámi</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH</td>
<td>R1</td>
<td>I</td>
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<tr>
<td>Very limited</td>
<td>Limited</td>
<td>Very limited</td>
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<thead>
<tr>
<th>Financial Services</th>
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<tbody>
<tr>
<td>Banks</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Credit unions</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Limited at Co-op store</td>
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<table>
<thead>
<tr>
<th>Fuel &amp; Power Costs</th>
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<tbody>
<tr>
<td>Imported, very high</td>
<td>Imported, very high</td>
<td>Imported, very high</td>
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<tr>
<td>Imported at Co-op store</td>
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<table>
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<tr>
<th>Water</th>
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<tr>
<td>Trucked</td>
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<td>Trucked</td>
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<table>
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<tr>
<th>Waste Disposal</th>
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<td>Trucked</td>
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<td>Trucked</td>
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<th>Telecommunication</th>
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<td>Developing</td>
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<td>Developing</td>
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<tr>
<td>Good</td>
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<th>Transportation Costs</th>
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<td>High</td>
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<td>High</td>
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<td>Medium</td>
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<tr>
<td>Low</td>
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<tr>
<th>Police Services</th>
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<tr>
<td>Good</td>
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<td>Good</td>
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<table>
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<tr>
<th>Postal Service</th>
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<td>Good</td>
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<td>Good</td>
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<td>Good</td>
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<th>Air Freight</th>
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<td>Expensive</td>
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<td>Expensive</td>
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<td>Expensive</td>
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<th>Rail Freight</th>
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<td>None</td>
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<td>None</td>
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<tr>
<td>No</td>
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<tr>
<td>Extensive</td>
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</tbody>
</table>

Legend: CH (Coral Harbour); RI (Rankin Inlet); I (Inukjuak); HGN (Happy Valley-Goose Bay and North West River); J (Jokkmokk)

In Canada, Happy Valley-Goose Bay and North West River had the most well developed infrastructure; Coral Harbour and Inukjuak had the least (see Table 11.5). My findings support those recently reported by the National Economic Development Committee for Inuit Nunangat (NEDCIN) (n.d.). The federal and territorial governments in Canada also provide some subsidies and cost of living.
adjustments to off-set the high costs. Rankin Inlet, NU has been working for several years on getting approval and funds to have a highway built from northern Manitoba. The highway would significantly improve access to goods and services at greatly reduced prices. This would have a large positive effect on the margins of Inuit and northern enterprises and thus improve their chances of success.

Compared to northern Canada, the Swedish Sámi in Norrbotten have extremely well-developed, more reliable and much lower cost infrastructure.

11.3.4 Remoteness

As suggested by Huskey, Lee & Morehouse (1992), my finding confirmed that “remoteness” is a relative term. Rankin Inlet, Coral Harbour and Inukjuak (located in Northern Canada) were very remote connected to the rest of Canada by air or by the annual sea lift in the absence of roads. Similarly, Northern Inuit communities in Labrador were serviced by air and were connected to the mainland by ferry during the summer. Access to all Inuit communities was very expensive. Satellite communications played an important role for all communities in connecting them to the world through the internet, telephone, and television. Radio was also important. Coral Harbour and Inukjuak had minimal economic development. My findings support the work of Dana, Manitok and Anderson (2010) that remoteness of Canadian Arctic communities hampered the development of Inuit entrepreneurship.

Although the Swedish considered Jokkmokk remote and sparsely populated, this was very different from Canada’s situation. Jokkmokk is located within several hours of major centers and connected by air, rail and highway to the coastal cities and Stockholm. Transportation costs are significantly lower. Jokkmokk has the largest population of Sámi in Sweden. It has been a historic site of reindeer herding and a major site of the Sámi winter market for more than 400 years. Jokkmokk has government services and major industry based on mining, hydro power and forestry. Jokkmokk has developed a cluster of tourist-related activities such as small-scale Sámi tourism enterprises, the Ájtte Swedish Mountain and Sámi Museum, and the annual Jokkmokk winter festival. Based on Pettersson
(2003, p. 29), the number of visitors to Jokkmokk in one day exceeded the total number visiting Coral Harbour, Rankin Inlet or Inukjuak in one year. Given the proximity of countries within Europe and the well developed transportation infrastructure, transportation costs would likely be far less to export reindeer meat from northern Sweden to countries such as France and Germany.

11.4 Inuit Subsistence Hunting versus Sámi Herding

11.4.1 Canadian Inuit Subsistence Hunting

Canada is a large country with considerable differences in climate and geography. Therefore, I saw wide differences in the seasonal resource distribution of caribou (Frieson, 1999). After Alaska started ranching reindeer in the 1930s, the Canadian government also looked the possibility of “ranching” reindeer in the Kivalliq area of the N.W.T. (now Nunavut). The scientific assessment showed there was insufficient vegetation growth to support it (Porsild, 1936). I was told in Nunavut, it was not possible to “ranch” caribou as it would take the vegetation 20 to 30 years to regrow.

Because caribou was not locally available, not all Inuit communities in Canada historically depended heavily on it in their diets. In Happy Valley-Goose Bay/Northwest River, and in Inukjuak, Nunavik, several Inuit commented that the Inuit were more “seal people” and “fishing people” as they lived on the coast and the caribou were less available. In fact, Inuit in Nunatsiavut had sometimes traded with the Innu for caribou. On the other hand, historic reports about Nunatsiavut described the Inuit hunting for caribou (then called reindeer). They still subsistence hunt for it and “the hunt is still in the blood (HA)”.

Canada’s legal system considers caribou as wildlife (although the grants for the development of commercial caribou harvests had come through the federal Department of Agriculture). In all Canadian sites, the Inuit interviewees clearly indicated that caribou should not be owned and should be wild. The response of Elder RB from Nunavut suggests an intelligent relationship with sentient caribou. They would ask would ask the caribou if they could adopt or raise them but it was wild. “The wildlife had asked them not to do that [herd or ranch].
Table 11.6 Inuit Hunting versus Sámi Herding

<table>
<thead>
<tr>
<th></th>
<th>Canadian Inuit</th>
<th>Swedish Sámi</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>RI</td>
<td>CH</td>
</tr>
<tr>
<td>Sustenance – use all parts (food &amp; clothing)</td>
<td>Sustenance – use all parts (food &amp; clothing)</td>
<td>Sustenance – more seal but still use all parts when caribou available</td>
</tr>
<tr>
<td>Wild herd migrates through yearly</td>
<td>Wild herd does not migrate always nearby</td>
<td>Wild herd does not migrate nearby</td>
</tr>
</tbody>
</table>

Legend: CH (Coral Harbour); RI (Rankin Inlet); I (Inukjuak); HGN (Happy Valley-Goose Bay and North West River); J (Jokkmokk)

Inuit expressed that caribou should not be penned up or corralled. One reason suggested for the discontinuation of the commercial caribou harvest at Inukjuak was the decision to use Sámi coralling techniques from the reindeer. Cuyler (1998) also suggested that when reindeer along with Sámi husbandry techniques were introduced to Greenland 60 years ago, the Greenland Inuit found the practices of coralling and fencing reindeer were not culturally acceptable.

All Inuit sites traditionally used caribou for food, clothing, tents and tools. Caribou, when available, fed everyone (rich or poor). The Inuit traditional cultural practice was to share the food within their community and with other communities. If caribou were owned, Inuit expressed concerns that people would not have access and would go hungry. Ownership was associated with greed and profit at the expense of others in the community.

In all the Inuit communities, I found the subsistence harvest was still necessary for survival. RJ commented, “Because they lack economic opportunity, families tend to still do these things.” The Inuit also commented that the country foods were better for their bodies.

Food imported from the south was very expensive and varied in quality and accessibility. Health Canada’s *Eating well with Canada’s food guide: First Nations, Inuit and Métis* (2007) showed caribou as an important nutritional source. The *Aboriginal Lifestyles Surveys* showed Inuit eat up to two meals a
week with caribou. In Nunavut, RD commented that families hunting as a clan brought in about 100 caribou and used all parts of these. To replace their clan family’s total subsistence harvest for all species, one would need an income of CAN$150,000 to 200,000 a year. Almost all Inuit communities in Nunavut (excluding Coral Harbour) had a small processing area and all had community freezers.

The settlement of Inuit land claim agreements reinforced the right to continue the Inuit culture. Through the Hunters and Trappers Support programs, Inuit hunters were paid for bringing caribou meat into the community freezer. It provided grants for hunting and sewing equipment needed by the Inuit.

The land claim agreements gave Inuit the right to freely dispose of any wild life that was lawfully harvested through barter, trade, exchange and gifts. The Inuit also had the right to harvest, process, and sell caribou for commercial purposes on Inuit lands assuming there were sufficient numbers after the subsistence harvest. For example, the land claims settlement agreement for Nunavut states that any commercial quota would be set and adjusted based on three criteria: the species availability after the subsistence harvest, inter-species availability of the subsistence harvest, and the needs of other communities for food.

On Southampton Island, the growing size of the herd combined with its geographic isolation was an important factor in the government allowing the commercial caribou harvest to occur for conservation purposes. By 2009, the Southampton Island herd near Coral Harbour had dropped to 13,953 from about 30,000 in 1997.

Many caribou herds in Canada are experiencing significant population decline. According to Inuit traditional and local knowledge, the caribou are following a natural 30 to 60 year cycle. Scientists are suggesting global warming is a factor but a clear link has not been established. Other reasons included increased harvesting pressure, due both to population growth and the increased reach of snowmobiles (Russell & Gunn, 2012). Campbell (2010) suggests the decrease in the Southampton Island herd also resulted from overharvesting of the bulls and reduced pregnancy rates due to brucellosis.
Even the subsistence harvest is being challenged. Wild caribou in some areas are less available. The N.W.T. government banned any subsistence and commercial hunting of caribou from the Bathurst Herd in 2010 (CBC News, Apr. 20, 2010). The Baffin Island caribou herd had declined by 95% since the 1990s. Aerial surveys showed only 5000 caribou. The Nunavut government banned any hunting from this herd on January 1, 2014 (CBC News Dec. 20, 2014). Strict harvest limits for the Southampton caribou herd were implemented in 2011 (Russell & Gunn, 2012). The commercial caribou harvest was stopped in Coral Harbour for a few years and its quota reduced. My Coral Harbour contacts said they were harvesting the caribou and sending it to Baffin Island. In early 2014, Coral Harbour’s hamlet council was quoted that “17,000 pounds of caribou meat had been shipped from Coral Harbour to Baffin region communities in just two months (Nunatsiaq News, May 20 2014). This was a clear demonstration of the strength of kinship ties and the cultural practice of food sharing.

The cost of hunting has also increased significantly and now depends on inflows from the wage economy. HF commented, “The knowledge, skills and talent are disappearing. Caribou tends to be a product of the older people.”

11.4.2 Swedish Sámi Herding of Reindeer

In comparison, my findings indicated the families of the Swedish Sámi around Jokkmokk had been reindeer herders for many generations. However, being Sámi was more than reindeer herding. Sámi culture included reindeer herding, hunting birds and game, fishing, and gathering food. Sámi did not hunt reindeer.

Today, according to the Swedish Reindeer Herding Act, only the Sámi were allowed to be reindeer herders and raise reindeer. If a non-Sámi owned reindeer, they required a Sámi to herd the reindeer. The reindeer migrated annually to obtain proper grazing vegetation and water. This ensured reindeer herding was sustainable as the Sámi moved the reindeer around. The Sámi also sanctioned those that left the sameby or did not act agreement with community consensus.
Although reindeer herding was protected for the Swedish Sami in Sweden, this was not the case for the Sámi in Norway or Finland. My findings supported the research of Riseth (2006), Rønning (2007), and others.

11.5 Processing, Products and Market Connection

11.5.1 Canadian Inuit

Livelihood Enterprises

Carvers

The Canadian Inuit carving industry was well established. All sites had been commercially carving since the early 1950’s at the instigation of a key entrepreneur from the south and support from the Canadian government. Since 1948, Inukjuak had been a key site for Inuit carving but recently had been losing this place. At all Canadian sites, carvers used the antler and bone for carvings and jewelry. These were home-based enterprises with the carving taking place in their homes, sheds or packing crates. Inukjuak carvers favoured the more traditional tools and tended to use the antler and bone as detail for carvings made out of soapstone. On the other hand, Rankin Inlet and Coral Harbour carvers used the traditional tools and dremmel electric hand tools. No larger scale industrial shop tools and equipment were reported or observed.

Inuit culture was incorporated into their carvings. They depicted the transformation of human and wildlife into spirit beings and into each other’s bodies. They also carved images related to traditional Inuit stories.

Access to market varied among the communities:

**Rankin Inlet** – Trade, Galleries & shops, Northern Store, Cooperative Store, Arctic Trader

**Coral Harbour** - Trade, Northern Store, Katudgevik Cooperative, Leonie Duffy’s licensed Arctic Trader
Inukjuak – Trade, Carvers Association at the Co-operative Store, Inuit Art Foundation

Happy Valley-Goose Bay - Trade, Galleries & shops, Labrador Craft Marketing Agency

The cooperative stores in the Arctic and the retail Northern Stores purchase the carvings directly from the Inuit carvers. These are then sold wholesale to the global market place.

**Seamstresses**

Inuit seamstresses at all sites softened caribou hides, tanned these, and then sewed Inuit clothing. The designs and patterns were passed down through families. Their clothing was sold directly to interested customers. Neither the Northern nor Cooperative stores would take their clothing products on consignment. The Inuit women also produced commercial Inuit dolls for collectors and museums. Caribou skin sometimes was used for the doll’s clothing. The Inuit doll makers had started to differentiate themselves. For example, RB’s dolls were noted for their intricately beaded amauti. IH’s dolls frequently had heads carved from local stone. IH also produced families of dolls. The doll makers often reflected Inuit culture and legends. To revitalise this craft and upgrade quality, specialised training had been offered in government sponsored workshops in Nunavut and by the Pauktuutit Inuit Women’s Organisation.

The Labrador government has sponsored workshops in caribou tufting, moccasin making, and wild crafting of dropped antler. Caribou hair is used for caribou tufting, pictures, fishing flies and pillow stuffing. Caribou sinew is used in snowshoes and in jewelry. In Labrador, most of the mitts, footwear and slippers were made from cow hide, not caribou. A shop owner explained it was difficult to get properly tanned caribou hides.

**Tourism**

The Canadian Inuit have formed few tourist related enterprises. The communities are small and few tourists come that far north. Inuit took visitors out on the land
on an occasional basis. Several Inuit did express interest providing in eco-tourism and adventure-tourism. Cruise ships had recently visited two of the communities and arranged for the locals to provided cultural activities. However the cruise ships did not return the following years.

**The Formal Economy**

I considered the Inuit to have entered the formal economy when their business appeared on in an Inuit or community business registry. All Canadian sites had Inuit businesses which offered guided hunting and outfitting, adventure, and eco-tourism. However, in Labrador, this was a major industry. A few Inuit women had registered their sewing businesses.

Inukjuak had the least economy when compared to the other Canadian sites. Enterprise was not considered to be part of its culture. The community had high unemployment and was looking at its natural resources to generate some self employment income. A community sewing centre was operated by Makivik Corporation through its Fur Harvesting, Clothing and Access Initiative. They employed several local Inuit women as seamstresses to make clothing. Since 1980, an Inuit, had owned and operated a company which sold shredded or hard antlers in Canada and internationally.

**Inuit Commercial Caribou Harvesting and Processing**

All Canadian sites had attempted commercial caribou harvests. The governments had initially organised these hunts.

**Rankin Inlet** - KAF was an Inuit corporation of the Nunavut Development Corporation (and previously the Northwest Territory government. After KAF built the new facility and began CFIA inspections, the Inuit in Rankin Inlet were no longer able to sell their caribou directly to KAF. However, since the Nunavut Land Claim Settlement in 2003, the hunts were under the jurisdiction of the NTI and the locally organised Hunters and Trappers Association. Local Inuit had begun selling caribou over the radio. When the quota for the commercial caribou hunt on Southampton Island was reduced, KAF sought an alternate supplier of
reindeer from Greenland. The enterprise also increased its processing of musk-ox and arctic char.

**Coral Harbour** - The Southampton Island commercial caribou harvest organised through the Aivit Hunters and Trappers Organisation had been ongoing since the mid-1990s. They initially sold the harvested caribou to an Ontario company. They developed a portable abattoir and made significant improvements to the process and equipment to achieve Canadian Food Agency Inspection certification and European Union certification. They had sought exemption from the CFIA for traditionally Inuit culture and were not required to corral the caribou.

They had exclusively sold the semi-processed caribou through the partnership with KAF. The commercial quota had been about 1500 caribou. The HTO contracted the operation of the hunt to different Inuit operators - a local Inuit entrepreneur and the community development corporation. The commercial harvest worked closely with the CFIA and the GNU wildlife biologists. The latter were important to monitor the sustainability of the herd. In the interests of higher profits, some operators had overhunted and rewarded for bringing in bull caribou. Overtime, this had negatively affected the herd.

Coral Harbour attempted to sell the bone, antler and other parts over the internet. They burned and buried the carcasses and skins. The Inuit women indicated the commercial caribou harvest occurred at the wrong time of the year for the skins to be good for making clothing.

As previously discussed, the herd had dealt with brucellosis which negatively impacted the mature caribou and calf birth rate. Recently, the commercial harvest was stopped. The following year the commercial harvest was allowed but most of the animals were used for inter-settlement trade rather than international export. In 2011, the herd had dropped to about 7,500 (CBC, 2012). CBC (2011) reported that “1,500 to 2,000 pounds of caribou meat was being shipped from Coral Harbour to communities on Baffin Island every other day.” The increase in social networking sites made it easier to ask for caribou and place orders and the discounted air cargo rates for shipments within Nunavut made it affordable.
The lack of a reliable supply of caribou product has also affected tourist operations throughout Nunavut and the Northwest Territories. Tourists frequently ask for caribou but the restaurants which were previously supplied by KAF cannot provide it on their menus.

**Inukjuak.** A local Inuit entrepreneur started a second company in 1996 with a Korean partner to commercially harvest and process caribou. By studying Sámi reindeer herding techniques in Europe and hiring a Sámi reindeer herder, IL attempted to transfer the knowledge to the green field operation. The commercial caribou harvesting and processing facility discontinued within two years due to high startup costs, cash flow problems, and lack of government support. A local Inuit commented that this harvesting and processing operation did not fit with Inuit culture. Several Inuit said this enterprise served as an inspiration for economic development within the community and “encourage all Inuit from any age to look into business ventures.” Although some Inuit in Nunavik had guiding and outfitting companies, only one was mentioned for Inukjuak and this took place on an occasional basis.

Nunavik Arctic Foods (a subsidiary of Makivik Corporation) held commercial caribou harvesting licenses for northern Quebec since 1994. It initially had four processing plants. They had well developed markets for high-end, fully processed and commercially packaged products. Several facilities were discontinued due to high operating, labour and transportation costs. They also needed to make more upgrades to maintain CFIA certification. They left the industry in 2005.

**Happy Valley-Goose Bay and Northwest River.** - From 1987 to 1996, the Labrador Inuit Association had operated a commercial processing plant in Nain. According to HF, this was discontinued because of frost damage to the building’s structure, new investments required to meet changing food processing standards, herds moving away from the area, and high transportation costs. The LIA sponsored a local butcher to take over the commercial license on the condition that Inuit and First Nations in northern Labrador had to hunt the caribou. Uncle Sam’s operations were inspected by the provincial government
and therefore its products could only be sold within Labrador and Newfoundland. Customers included tourist resorts and restaurants throughout Labrador. About half the company’s products were sold locally for school canteens and vending machines, gas stations and convenience stores. The company produced a variety of products from caribou including burger patties, steak, roasts, stewing beef, jerky, sausage (hot or regular), bologna (maple and garlic), salami, pepperoni, souvlaki and ham. They were exploring producing pet food. Local people could have caribou they hunted processed at three outlets including Uncle Sam’s.

A new market had opened in Labrador with the opening of the Voisey’s Bay Nickel Mine. The Labrador Catering Limited Partnership (a registered Inuit partnership) purchased caribou to feed the mines employees and satisfy individual and regional food preferences. The camp also had a separate traditional country kitchen where Inuit and Innu mine employees could bring in their own foods to make meals for themselves.

Goodfellow-Baikie, a local entrepreneur had patented a caribou fur felt process and product. She also had a specially designed felt maker machine created. The prototype project in Nain and pilot projects in Northwest River successfully transformed caribou fur into felt liners for gloves which were made from caribou and other hide. The project used caribou skins provided by Uncle Sam’s.

I did not observe any processed caribou skins for sale at any stores in the Canadian sites. The hide sold in one Labrador store was actually deer.

With the decreases in the caribou population and the changing caribou migrations of the George River Herd, the Nunatsiavut government in Labrador was relooking at the development of caribou farming. They were working internationally with the Sami to gain knowledge around reindeer herding and the possible development of partnerships to meet growing demands for reindeer and caribou meat.
This discussion clearly reinforces that the resource base for an Indigenous enterprise must be sustainable and resilient to commercial-scale harvest (Austin & Garnett, 2011; Austin & Corey, 2012; Zander et al., 2014)). It also shows the benefit of performing longitudinal studies on Indigenous enterprises based on wildlife.

11.5.2 Swedish Sámi

I considered the Swedish Sámi reindeer herders to be in the formal economy. The Sámi traditionally used all parts of the reindeer for food, shelter, clothing and transportation. Currently, the Sámi personally used reindeer for food, clothing, and essential items. Sámi herders raised reindeer and sold them commercially through the sameby to local processors. The Sámi family could also process the reindeer meat on a small scale by cutting, smoking and drying it. The product was then sold to people they knew or at fairs and markets.

Reindeer meat was readily available in the retail food stores and on restaurant menus. Reindeer meat as a product offered a unique Indigenous experience. A shift in consumer demand had resulted in leaner meats and a wider variety of products and cuts. As was previously discussed in Section 2.3, the global meat market was becoming more competitive. New imports of reindeer meat from Russia and red deer from New Zealand were putting pressure on prices and affecting traditional supply chain partnerships.

The mature reindeer horns were sold internationally for food or potency medicine. Unlike in Russia, the Sámi in Sweden did not cut off and sell the immature antler buds as they felt the reindeer could bleed to death. Horns (antlers) were also sold for handicrafts. Good reindeer horns were sold to local Sámi craftsmen. These were used to make knives, bowls, and other traditional Sámi items. The smaller lesser quality horns were sold to non-Sámi for lower quality items like cheese cutters. Reindeer horn carving was considered to be a prestigious Sámi occupation. Carvers received higher compensation for their work then those using reindeer in the “soft” crafts. Some reindeer items I observed for tourists at lower price points were key chains, bottle stoppers, potato testers, buttons, rings, necklaces, game pieces, and jewelry.
Reindeer skins were exported to Finland and to eastern Sweden. Some skins were sold to a local Sámi who tanned and dyed these using traditional techniques. These were sold to local Sámi making traditional Sámi clothing. Unlike in Canada, tanned reindeer skins were readily available to tourists for about 175 Euro. An unusual product was JI’s use of reindeer ear notches in jewelry.

Sámi crafts were sold at local markets and stores around Sweden and through the Sámi Duodji. Some local craftspeople had their work on display in Jokkmokk stores. Several craftspeople sold their work through their home based studios. Many of Sámi craftspeople had websites. I observed reindeer leather made into pouches for coffee, tea or tobacco; purses; belts; wrist bands; clothing such as leggings, gloves/mittens, shoes, jackets, hats, pants, vests; and artwork.

Some Sámi used the reindeer to make health and beauty products. Reindeer bone was being experimented with for human grafting. Sámi herders had been involved with tourism for three generations. However they were forming separate enterprises and focusing on particular niches such as eco or adventure tourism, accommodations, home stays, and restaurants. The Sámi post-secondary institute assisted with developing the new skills and ensuring the students had small business management skills.

JA and JB had formed a company which had developed a new ITC system for tracking reindeer movements using the internet. This tracking system would be less expensive than the radio collars currently used and reduce the petroleum costs associated with tracking the reindeer. The sameby had also become involved with establish internet connectivity in Jokkmokk and the surrounding areas.

11.6 Entering the International Reindeer/Caribou Market

Although Sámi reindeer herders were located in Northern Europe, Sámi had travelled to Canada, Alaska, Greenland and other countries to raise reindeer. In Canada, this went back to the Grenfell expedition in the 1800s. One Sámi family currently had members raising reindeer in Scotland and South America.
A Swedish Sami expert in meat processing comes to Greenland to assist Mr. Stefan Magnusson with processing Isortoq station’s reindeer to international export standards (p. comm. with A. Meis Mason).

Canada has been trading Inuit carvings on the global market since the 1940s. The three major Canadian trading companies wholesaled Inuit carvings to the world – Canadian Arctic Producers, the Inuit Art Foundation and the Inuit Art Marketing arm of the Northwest Company. They had showrooms in major Canadian cities and had recently introduced 360 degree images of the carvings on their websites. Inuit carvers sometimes were asked to attend show in other countries but they found this difficult to do it because of the need for passports, their lack of money, and their difficulty operating in another language (other than Inuktitut).

The primary reason for Canada’s late entry into the reindeer/caribou market was the Inuit cultural reluctance to sell caribou meat. Commercial caribou harvests organised by the government only began in the mid-1990s in a few locations. Their primary purpose was for conservation. They also built on traditional Inuit skills and provided local employment, cash, and profits for Aboriginal corporations. Product from Southampton harvests went to the KAF and Ontario. KAF sold generally in what is now NWT and Nunavut. Product from NAF stayed in Quebec and product from Labrador remained with there. These commercial harvests were highly subsidised by the government.

Another key reason for Canada’s late entry was the highly restrictive regulatory requirements which created barriers to inter-provincial and international trade. CFIA certification was difficult and costly to obtain. With the strengthening of the Canada-United States free trade agreement, CFIA certification and USFDA certification requirements became very similar.

When KAF’s facility burned down, this created an opportunity to rebuild a state-of-the-art facility with a scale that allowed international export and with processes which could meet stringent international food quality standards. Strengthening consumer demand for Indigenous, organic or chemical free foods had also created a market niche. NAF Corporation also made significant
investments in large scale commercial harvesting and processing as well as training. The Canadian government participated by providing grants to the Inuit organisations. The LIA chose not to make these investments and closed their facility.

European certification and packaging regulations were constantly changing, expanding and becoming stricter. Exporting into the US was challenging as the customs rules relating to how game meat is classified were unclear, and the regulations and food handling requirements and comprehensive record keeping requirements were complicated (Foreign Affairs and International Trade Canada, 2004).

The Inuit processors also faced cultural and language barriers. KAF overcame this by using a network of distributors. KAF also worked with Canada’s Department of Foreign Affairs to gain the required trade skills. The Canadian government provided grants to KAF and an NGO, People First to assist the company with the US and European trade missions.

Initially international export was attractive because prices were fixed in US dollars. However over time, the Canadian dollar lost its value compared to the US dollar and European Euro, therefore international trade became less attractive. KAF also faced an EU tariff of up to 18% and competed against Northern European reindeer which entered the EU duty free. This was clearly an obstacle when doing business with the European market.

11.7 Barriers to Inuit and Sámi Enterprise

Both Canadian Inuit and Swedish Sámi identified barriers and challenges to developing their enterprises. Table 11.7 illustrates how the communities had similarities and differences. The barriers mentioned included language, lack of education, lacked business knowledge, lack of funding and capital, legal and regulatory frameworks, ownership of lands and resources, rights to engage in enterprise, rights to sell their products, remoteness and access to markets.
The Canadian Inuit living in northern Canada had lower levels of formal education. Perhaps because many of the parents were still traditionally tied to the land, it was hard for the youth to stay in school. It was interesting that in Rankin Inlet and Coral Harbour they mentioned that families would decide which children would become educated. Language presented an issue in all the communities as Inuktitut retention was very high. Although they were the official languages of Canada, English and French were second languages. Language difficulties created problems when filling out forms and completing transactions with government and business. Language was not mentioned as an issue by the Swedish Sami.

All Canadian Inuit communities mentioned that Inuit had ideas but lacked business knowledge to commercialise them. Swedish Sami were developing business knowledge as it pertained to reindeer herding but lacked knowledge about operating in the new economy.

All the Canadian Inuit and the Swedish Sami community identified that they obtaining funding and capital was a problem. Grants however were available. This seems to be a consistent issue raised by Indigenous entrepreneurs in several countries.

All Canadian Inuit and Swedish Sami communities and identified dealing with government bureaucracy was a problem. However, unlike Indigenous entrepreneurs in Africa, no interviews mentioned “gifts” or corruption.

Settlement of the Canadian Inuit land claims had clarified ownership of lands and resources, rights to engage in enterprise, and rights to sell their products. The Sami had no land claims and were dealing with challenges to grazing areas and young people were having more difficulty entering the livelihood. It was clear what traditional Sami reindeer herders were allowed to do but clarification was needed Sami enterprises entering the new economy. Lack of land claim settlements was affecting Indigenous herding in Norway, Finland, Russia as well as Africa.
As indicated in the previous discussion on remoteness, lack of proximity to large markets was much more significant for the Canadian Inuit than the Swedish Sami. Sections 11.7.1 – 11.7.5 discuss several of the above topics in more depth.

Table 11.7 Barriers to Inuit and Sámi Enterprise

<table>
<thead>
<tr>
<th></th>
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<th>Swedish Sámi</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>CH</td>
</tr>
<tr>
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</tr>
<tr>
<td>Lacked business knowledge</td>
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<td>Yes</td>
</tr>
<tr>
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<td>Yes</td>
</tr>
<tr>
<td>Lacked market knowledge</td>
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<td>Yes</td>
</tr>
<tr>
<td>Difficulty with permits &amp; regulations</td>
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<td>Yes</td>
</tr>
<tr>
<td>Distance to Markets</td>
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<td>Yes</td>
</tr>
<tr>
<td>Limited space for new premises</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Legend: CH (Coral Harbour); RI (Rankin Inlet); I (Inukjuak); HGN (Happy Valley-Goose Bay and North West River); J (Jokkmokk)

11.7.1 Rights to Land and Resources

My findings illustrated that all the Canadian Inuit sites were covered by land claim settlement agreements. These provided Inuit beneficiaries with the capital to start up small businesses or to use for home ownership which could then be pledged for investment. The agreements also clarified the Inuit rights to engage in enterprise and their rights to use their land, resources and wildlife for commercial
purposes. Although the Inuit still could not own caribou, they gained the right to hunt, harvest, process and sell caribou and its products. They also became part of the co-management process which set the quotas for harvesting. Since the agreements were put in place, the Inuit have assessed their economies and began to choose economic development strategies. The funds in the agreements also provided for education and skills training. The Labrador Inuit Lands Claims Agreement Act, which was signed in 2004, provided their Inuit with more self-governance than the previous agreements. The Canadian Inuit commented that they learned from each other’s experiences in implementing and administrating the agreements and that these were living documents to be renegotiated over time.

With regard to the Swedish Sámi my findings were similar to those of other researchers such as Riseth (2005, 2006). The Sámi in Sweden did not have a land claim settlement and the Sámi reindeer herders did not own their land. They had traditional rights to be reindeer herders (only a Sámi person could own and raise reindeer). The sameby was the legal organisation which managed reindeer herding in a specific geographic area. It was both an economic and administrative body. All Sámi rights concerning hunting, fishing, and forest use were administered by the sameby. A single sameby had several different reindeer herding companies which may have one or more owners (Sámiskt, 2006). Under the existing legislation, the Swedish government set the upper limits on the number of reindeer within a sameby. The sameby was only allowed to be involved in reindeer herding and not in any other economic activities (such as tourism). The legislation was under review and appeared to be changing. The lack of land ownership rights also threatened the reindeer herders’ livelihood because grazing lands and reindeer migration routes patterns were being encroached on by private land owners, timber and mining companies, and hydro-electric projects.

11.7.2 Commercial Property versus Private Housing

There was a shortage of commercial property and supporting infrastructure in Rankin Inlet, Coral Harbour and Inukjuak. This was most severe in Inukjuak
where premises were not available for enterprises to rent and the conditions of the buildings were poor.

Many buildings and housing were owned by the government. In Rankin Inlet, a private Inuit corporation consisting of several Inuit families had purchased properties in several northern communities and was renting this back to the Nunavut government.

Inuit home ownership was increasing as a result of the land claim settlement and this will provide an asset for borrowing leverage in the future. However, Inuit faced a disincentive towards home ownership as the government heavily subsidised the public housing and the costs of operations, repairs and maintenance were very high. The situation in Happy Valley-Coral Harbour and North West River was much less constrained.

Concern was expressed about formal enterprises being operated in public housing. In Inukjuak, the Kativik Regional Government had clarified that enterprises could be operated in the public housing if they had separate entrances. Several of the Inuit accommodations had metal sheds beside them where the carvers worked.

In comparison the Swedish Sámi in Jokkmokk occupied a combination of public and private housing. Ownership of homes was much higher and no one mentioned using their home for enterprise was a problem. Many craftspeople and artisans operated their workshops and studios in their homes.

11.7.3 Geographic Accessibility and Logistics

Although I had briefly discussed remoteness in Section 11.2, more information is provided here.

**Rankin Inlet** - The community was located on the mainland and was accessed by two major airlines and two regional airlines which operated three to six days per week. These connected with the major centers of Iqaluit, Nunavut; Yellowknife, Northwest Territories; Regina, Saskatchewan; Edmonton, Alberta; Churchill and Winnipeg, Manitoba and Montreal, Quebec. There was no highway, train, bus or deep water harbour. Access for small ships occurred for
about six weeks during the summer each year. The nearest large community was located in Winnipeg, Manitoba. The airfare was CAN$945 one way (with tax).

**Coral Harbour** - The community was very remote. Located on Southampton Island, it was accessed by two small airlines operating two flights per day six days per week. It had no highway, no deep water harbour. Similar to Rankin Inlet, it was accessible for small ships for about six weeks. Airfare to the nearest larger communities was CAN$350 to CAN$460 one way (with tax) to Rankin Inlet and $1275 one way (with tax) to Winnipeg.

**Inukjuak** – This community appeared to be the most insulated of the sites I visited. It was accessed by one small air flight daily. There was no highway, train or bus. Located on the coast, it was accessible by small ships for about six weeks during the summer. The air flight to Montreal, the nearest large community, cost $2776 one way (with tax).

I should also mention that for the above communities, the costs of air flights were reduced by about 50 per cent for an Inuk or a registered Inuit business.

**Happy Valley - Goose Bay and Northwest River** – These communities were the most accessible of the Canadian sites with air flights once daily from mainland Ottawa or St. John’s. This served as the travel hub for Labrador. The Trans Labrador highway connected via ferry all year around to central North America. The Port of Goose Bay had two industrial docks.

**Jokkmokk, Northern Sweden** – Although considered remote by Swedish standards; it was highly accessible by Canadian standards. It had a highway, one bus daily, and main train service from Stockholm to Murek (one hour away). A special seasonal train ran in summers and for the annual Jokkmokk festival. The Lulea airport was three hours away and well connected by bus. The nearest large community was Lulea (3 hours by bus or car).

Since this research began, the Canadian government has reduced the subsidies and the method of delivering them for food going to Inuit in the northern communities from southern Canada. This has imposed significant hardship.
11.7.4 **Distance to Resources**

**Rankin Inlet** - KAF was the only CFIA and EU certified caribou meat processing facility in Canada. There were no butcher operations within the local community. Rankin Inlet and Churchill, Manitoba had strong social, government and business connections.

**Coral Harbour** - This small community had a portable abattoir but no meat processing facility. Other communities in Nunavut had small meat processing facilities for local use. The nearest meat processing facility was KAF located in Rankin Inlet 90 min. away by air. This created a problem for the accommodation providers as they could only offer guests federal or territorial inspected meat so were only able to provided caribou if it was purchased from the co-operative.

**Inukjuak** - The community currently had no portable abattoir or meat processing facility. Since the closure of Ipushin, the nearest meat processing facility was located in Kuujjuuack (accessible only by air).

**Happy Valley-Goose Bay and North West River** – The first two communities were connected forming a medium sized community. It had one Inuit meat processor, similar to a local butcher shop, which was provincially certified. Caribou harvested by the owner and Inuit in Northern Labrador was flown in. The community had two non-Inuit butcher operations; one was located in the local co-operative. North West River, located 30 miles away had no butchers.

**Jokkmokk, Northern Sweden** – In contrast, this community had several small scale Sámi meat processors in the surrounding area. One large Sámi reindeer slaughter and meat processor was located within 2 ½ hours by a highly accessible, well maintained highway.

11.7.5 **Investment Banking and Start up Grants**

Limited access to financial services is commonly noted as an impediment to Indigenous entrepreneurship and economic development. It was raised in all the
Canadian Inuit communities as a major problem. However, steps are being taken to improve the situation.

**Rankin Inlet** – The CIBC and Royal Bank offered full financial services including start up and operating loans for Inuit business. The Nunavut Development Corporation provided small business loans for start-up, operations, purchase of assets, and market development. The Nunavut Tunngavik provided start up loans for Inuit businesses. Inuit were eligible for loans from Aboriginal Business Development Canada. Using land claim settlement monies, the Nunavut Development Corporation had recently taken an investment position in a major southern bank and expected this to improve service to the Inuit residents.

**Coral Harbour** – There were no banks. The Nunavut Development Corporation, the Nunavut Tunngavik and Aboriginal Business Development Canada provided similar loans and grants as in Rankin Inlet.

**Inukjuak** – Older carvers indicated they had built up their equipment though self-financing. Some grants were available through the Hunter Trapper Support Program. Loans for small business start up were available from the Nunavik Financial Services Co-operative and Makivik Corporation. Loans and grants were available from the Kativik Regional Government, the Quebec Government and Aboriginal Business Development Canada.

**Happy Valley - Goose Bay** – Inuit businesses had far more options. Loans for start up of enterprises were available from Royal Bank, Scotia Bank, Bank of Montreal, Bank of Nova Scotia, and Eagle River Credit Union. Loans and grants were available from Atlantic Canada Opportunities and Aboriginal Business Development Canada.

It should be noted that several Inuit commented on the land claim settlements providing a stake for the Inuit to take equity positions in financial organisations and resource development companies with Inuit and non-Inuit partners. This was similar to the findings of Meis Mason, Dana and Anderson (2012) on oil and gas development in the Northwest Territories.
The Inuit interviewees reported difficulty in obtaining loans and grants because of challenges completing the paperwork and meeting the approval criteria. Some mentioned their difficulty with having no bank accounts or lacking credit histories with the financial institutions. Factors in the decision making to provide grants from the Inuit development corporations and the federal government included the number of jobs created, the use of local community resources, and the contribution to the community (particularly of essential or services with limited availability and competition).

My findings indicated that economic development or business officers located in Rankin Inlet, Coral Harbour and Inukjuak actively tried to coordinate and leverage various federal, territorial or provincial, and Inuit government policies and programs to maximise benefits obtained by their communities. They also provided a large role assisting with developing business plans, completing the required paperwork, and assisting with completing loan and grant applications. They also provided advice during the start-up and operation of the business as well as assisting the local Inuit entrepreneurs with maintaining the financial records.

Therefore, it is very important that the development officers have the required expertise to prepare grant applications and business plans and a thorough knowledge of government policies and programs. During the five years, I partnered with one community in this research; it had three senior administrators and three economic development officers. Retention of the expertise within the community is also important.

Frederick and Foley (2006, p. 9) attributed the failure of Indigenous businesses to a lack of coordinated government policies and programs, lack of financial management tools, lack of information, and the “unwarranted elevation of poor examples”. My findings showed examples where the efforts to coordinate government policies and programs contributed to Inuit business success.

In the case of KAF and the Southampton Island caribou processing partnership, there were solid examples of the enterprises and the Nunavut and federal
governments partnering to ensure the success of the commercial harvest. In my initial research (Meis Mason, Dana and Anderson, 2007), I found the following:

- Canada Special Agricultural and Rural Development funds were used for infrastructure and equipment investment.
- Canada Human Resource Development grants were used for skill training.
- Canada Foreign Affairs and International Trade provided training in market development.
- The People First Organisation received a grant to assist with the trade missions for market development. KAF also assisted the Coral Harbour operation by providing training on accounting software and assisting with advance ordering of materials required for the annual harvest.

My findings showed governments both constrained and encouraged opportunities through access to decision makers, information, funding, and markets. Similar to Foley (2006), the Canadian and Inuit governments tended to encourage funding to communities and administrative units rather than to individuals. However, I also saw the Nunavut and Nunavik governments actively encouraging the development of specific Inuit entrepreneurs by designating funds for start-up or investment in assets, establishing preferential procurement programs, sponsoring Inuit business registries for communities and regions, providing training opportunities; and sponsoring trade shows.

I also think it is important to note that the private owners of Ipushin and Uncle’s Sam’s commercial caribou meat processors had received much less government support than KAF in Nunavut and NAF in Nunavik. These entrepreneurs had assumed personal risk by using bank and personal financing. In fact, the principals both commented on the lack of government support. Goodfellow-Baikie had also spoke about using large amounts of her own funds and the difficulties she encountered in obtaining grants. This eventually resulted in the termination of the caribou fur-felt projects.

Jokkmokk, Northern Sweden – Swedish Sámi could choose commercial services from two local banks – Sparbanken Nord and Handelsbanken. My
interviewees commented on the availability of start-up loans and grants from the Norrbotten Region and Swedish government. Several interviewees indicated they had used these. They also mentioned that the European Union had provided additional funding for development of Swedish Sámi entrepreneurship. Some Swedish Sámi had noted that not many Sámi they knew actually had received grants. The Swedish Sami involved in the new IT reindeer project had also encountered difficulty in getting grants and loans and had committed large sums of money taking the idea to start-up.

11.8 **Lack of Information**

Canadian Inuit indicated that they lacked information for dealing with the provincial/territorial or federal government and markets and saw this as a barrier. Underlying causes of this were the remoteness of the communities as well as the lack of fluency in French or English. The Inuit Tapiriit Kanatami has been working to achieve recognition of Inuktitut as the official language of all Inuit in Canada not just Nunavut. Access to government services and information improved in Nunavut because of required hiring of Inuit for Nunavut government jobs and the required use of Inuktitut for government and business transactions, if desired. All Inuit communities had increased their connection to southern Canada and the world through digital communication technology – computers, internet services, and the development of Inuktitut fonts and software. Nunavut had sponsored trade missions to Winnipeg, Manitoba as well as student trips to Ottawa, Canada’s capital city and to northern Europe. Nunavik had sent potential young entrepreneurs south to Montreal, Quebec for training. The Inuit regions had recently held the Northern Lights Trade show which had participants from all Inuit land claim settlement areas. Interviewees from Inukjuak and Happy Valley-Goose Bay spoke positively about the trade show adding it had really opened their eyes.

Jokkmokk had created the *Structuren* which had information packages, business advisors and special workshops for entrepreneurs to increase their business knowledge and connection to government services. They had also sponsored
women’s networking groups. The Sámi were referred to the Sámiportelen for more information on starting up enterprises.

My research findings showed that many Inuit livelihood businesses were in survival mode. The size of communities and distances limited the available market. Often the costs of inputs and transportation were huge barriers. Underlying this was the lack of business knowledge and a cash-based economy with little savings.

My findings suggested that Inuit enterprises discontinued their caribou harvesting and processing operations because of a lack of caribou, the high transportation costs to connect the product to markets, and a shortage of capital for start-up and upgrading facilities to meet increasing quality assurance standards or to restore a facility after ice, mould or water damage. My research supported Dana and Honig (2006) that “dis-entrepreneurship” or failure of community enterprises resulted from, geographic isolation and lack of infrastructure.

I am unable to comment on whether failure in community leadership or failure to adequately diversify the economic environment were contributing factors. As Hindle and Moroz suggested (2008), importing non-Indigenous methods without adjustment for local Indigenous culture and context could also contribute to failures. This was seen in the Inukjuak caribou harvesting and processing operation where the corrals and were constructed with wood imported from southern Canada and the ramps were later found to be unnecessary.

11.9 Measures of Enterprise Success

Measures of success must be considered within cultural contexts. Measures of success described by the Inuit and Sámi are reported in Table 11.8. My findings illustrated that profit as a sole measure of success was inappropriate. Inuit and Sámi measures of success included both profit and social dimensions such as employment for family and community members as well as provision of training. This was similar to the findings reported by Wuttunee, 1992 and 2004;
Redpath & Nielsen, 1997; Foley, 2003; Lindsay, 2005; Dana, 2007; Kayseas, 2009, among others).

Table 11.8 Inuit and Sámi Measures of Success

<table>
<thead>
<tr>
<th>Inuit</th>
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<tbody>
<tr>
<td>RI CH I HGN J</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operating measures: bull, breeding cows, birthing and survival of calves.</td>
</tr>
<tr>
<td>Survival</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
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<tr>
<td>Profit</td>
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<td>✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>Greed – Cannot make too much. Cannot ask about profit or size of herd. Sámi do not think this way but be it is becoming more important. Reported to government.</td>
</tr>
<tr>
<td>Harvest</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
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<td>Harvest</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Inuit “Not too much”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficult</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Inuit don’t understand</td>
<td></td>
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<tr>
<td>Quality &amp; Workmanship</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Using Local Resources and People’s Skills</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Creating and Retaining Employment for Self, Family &amp; Community Members</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Firm Growth</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Provision of Training to Others</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Reducing Dependency on Imported Foods, Goods &amp; Services to Community</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
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<tr>
<td>Provide essential services</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Creating Infrastructure for Community</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
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<td></td>
</tr>
<tr>
<td>KAF</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>CDC owns assets</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>(little present)</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Maintain Culture and Lifestyle</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>Recognition By Others Outside Community</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td></td>
</tr>
<tr>
<td>In Balance With Environment</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
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<td></td>
</tr>
<tr>
<td>Legend: CH (Coral Harbour); RI (Rankin Inlet); I (Inukjuak); HGN (Happy Valley-Goose Bay and North West River); J (Jokkmokk)</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
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</table>
The Canadian Inuit currently depend upon the subsistence harvest. With food imports so high, maintaining their food security is paramount (Meis Mason, Anderson & Dana, 2012; Ford & Beaumeir, 2012; Tester, 2006). Setting the commercial quota on an annual basis to regulate the harvest numbers and sex of caribou killed was very important.

In each Canadian community, I saw Inuit desiring to overcome disadvantages by becoming self-reliant and making a good life. The Inuit were self-employed out of necessity to support their families as the communities had few other jobs. This is important because people in southern Canada have little contact with Inuit and still carry a stereotype of Aboriginal people as indolent and happily being dependent on the government for transfer payments such as social assistance, family allowance, and employment insurance.

The Inuit livelihood enterprises were small scale and craft focused. The Inuit in Inukjuak were the most traditional with many still focused on using hand tools.

The Inuit were focused on survival, and perhaps for this reason growth was never discussed with me. Generally, the Inuit livelihood enterprises were not thought of as a business. Key informants commented on the focus on immediacy, small scale production, lack of inventory, and not being able to produce for market demand. Inuit selling to shops and galleries had difficulty understanding mark-up. Communities were small so they could only support one or more businesses.

The Inuit livelihood entrepreneurs in Coral Harbour, Rankin Inlet and Inukjuak were aware of the need to make a profit but were still learning to track revenues and expenses and manage cash flow. None considered profit as the main goal of their enterprise. The term “profit” was often linked with “greed” and making money at the expense of others in the community.

Success was also measured in terms of using one’s hands or traditional skills to make a product one was proud of, meeting community needs, preserving their culture and lifestyle, passing their knowledge to the next generation, and improving awareness about the Inuit culture and lifestyle.
As Inuit enterprises became more formalised, they became more profit oriented. This may have been influenced by the need for funds from government and financial institutions for start-up and operations as well as the increased reporting requirements. They still were expected to meet the above measures of success, particularly behaving in a responsible manner towards the environment and community.

Similar to Berkes and Adhikari’s (2006) findings in South America, Inuit enterprises also provided multiple, social and economic benefits for their communities. The government owned KAF and the community-based Coral Harbour caribou harvest were expected to break even, increase profits, and reduce dependencies on loans and subsidies. Other measures of success included creating and maintaining employment on either a full-time or seasonal basis, using traditional skills, enhancing capacity through skills training and development, preserving culture and traditional skills, transferring knowledge between generations, retaining profits in the communities and being good stewards of the land, water and resources.

Other benefits the Inuit identified were pride in their accomplishments and the recognition they had received from the external world. Encouragement of healthy lifestyles to maintain traditional hunting skills or to pass required medical certification for employment was also mentioned. Government officials also used measures like supporting community infrastructure and spin-off effects on the local economy.

Leftover meat and bones from the commercial caribou harvest were taken back to the Inuit communities to be shared. This clearly demonstrated the intertwining of commercial and subsistence harvests (Dowsley, 2012; Marquardt & Caulfield, 1996).

The finished processing of caribou meat for sale in southern Canada or internationally usually was not done in the local community where the harvests were conducted. Therefore, the added value and profits went outside. Community members noted they had limited access to the commercially processed caribou products and if the products were available these were very expensive. Pressure
was being placed on the companies to refocus on the regional markets rather than the international markets (similar to what Aarluk Consulting Inc., 2005 reported on caribou and inter-settlement trade in Nunavut.)

Success of Inuit commercial meat processing operations was measured in terms of sales, profitability, development of new products and markets, providing jobs, reducing debts and subsidies, gaining and keeping certification, growing assets, increasing operational efficiencies, decreasing costs, and product quality.

Some Inuit commercial caribou harvesting and processing operations had discontinued in Nunavik and Nunatsiavut. Reasons for these closures had included lack of fit with community values, high operating and transportation costs, too costly to repair assets damaged by weather and mould, and the need to invest in new assets and processes to meeting increasing quality assurance standards. As an outsider looking at these enterprises, I was also struck by the short time frame in which they were expected to develop consumer demand for caribou, develop new markets and deliver profits. Zander et al. (2014, p.122) mention that a pre-condition of an Indigenous wild-life based enterprise continuing was that “markets needed to be high value, pre-existing and of suitable scale.”

Compared with the Canadian Inuit, the Swedish Sámi entrepreneurs were much more profit oriented. They definitely valued efficiency and effectiveness and had adjusted their economic development strategies to achieve them. All interviewees, no matter what their enterprise, spoke of the need to make profit and invest in training, tools and equipment which would allow this to occur. For example, the sameby had recently invested in a new more efficient corral for the gather and separation corral. The Sámi post-secondary institution was assisting with economic adaptation through providing business training. The Sámi ITC project had created an internet portal enabling distant communication, reinforcing family connections, access to online training. Both Rankin Inlet and Coral Harbour in Nunavut and Jokkmokk in Sweden had strengthened Indigenous enterprise by creating alliances, partnerships and clusters.
The Swedish Sámi families had cooperated in the formation and operation of the new enterprises. Figure 11.1 illustrates how reindeer separated for slaughter could go to a Sámi cooperative such as Renomera or to a smaller family operated meat processor. The meat from the processor could then go to either the restaurant which was opened by a family member or into their retail store. The better antler went to Sámi carvers; the better hides went to Sámi tanners. Handicraft and clothing producers used the skins tanned from their own families’ reindeer, purchased from the local Sámi tanner or purchased from other outlets. The restaurant was co-located with the Ájtte Mountain and Sámi Museum taking advantage of time and space. Sámi tourist operators often used the family reindeer as part of their cultural packages. The Sami post-secondary institution offered courses to enhance skills in all areas. Organisations such as the Samiportelen, the Structuren, the Sami Reindeer Herders Association and the Jokkmokk Municipality were all part of the entrepreneurial eco-system. Working together increased the marginal value of each reindeer (Labba & Jernsletten, 2004; Cope, 2002).

Figure 11.1 Swedish Sámi Value-added production

*Did not participate in research*
11.10 **Inuit and Sámi Culture**

My findings showed that Canadian Inuit and Swedish Sámi culture affected the opportunities which were identified and how these were exploited (Dana, 1995; Lindsay, 2005; Lindsay et al., 2005; Foley, 2005 & 2007; Hindle & Moroz, 2009; Meis Mason et al., 2012.) My findings did not support Galbraith’s (2006) contention that current Indigenous economic and entrepreneurial development strategies made inaccurate historical and cultural assumptions particularly with regard to 1) “a different or communal sense of property ownership”, 2) “a more collective attitude toward economic issues” and 3) “environmental protectionism or harmonious relation with nature”.

The Inuit and Sámi cultural products often portrayed their lifestyles and resources. The products often were used to tell about their history, traditions, and legends. My findings were similar to those of Chapman (1992); McCaskill & Newhouse (1999); Redpath & Neilson (1997); and Lindsay (2005).

Interviewees identified that Sámi handicraft contributed to Sámi income. My research found that the size, quality, content and design of both Inuit and Sámi products were being adjusted to match the expectations of tourists regarding cost, appearance and portability.

Swedish Sámi carvers reported that they were having difficulty obtaining appropriate antlers. The size and quality of the antlers were being reduced as the age and gender mix of Sámi reindeer herds was being adjusted to deal with changing market demand and regulations. This had not been noted by other researchers such as Pettersson (2002 and 2003) or Sunna (2006).

Sections 11.10.1 to 11.10.8 discuss more fully acceptance of selling, decision making and consensus, kinship and social capital, elder knowledge, gender roles, taboos and prohibitions, waste, and innovation and adaptation.
### Table 11.9 Key themes relating to the interaction of Inuit and Sámi culture on entrepreneurship

<table>
<thead>
<tr>
<th>Canadian Inuit</th>
<th>Sámi Swedish</th>
</tr>
</thead>
<tbody>
<tr>
<td>RI</td>
<td></td>
</tr>
<tr>
<td>Common property. Not in culture to own caribou or sell meat; share food</td>
<td>XXX</td>
</tr>
<tr>
<td>Not in culture to be in business – government is often service provider</td>
<td>XXX</td>
</tr>
<tr>
<td>My observation: Inuit preferred cooperative, community owned, or Inuit</td>
<td>XXX</td>
</tr>
<tr>
<td>government owned. Few private entrepreneurs present</td>
<td></td>
</tr>
<tr>
<td>My observation &amp; (Table split - continued on next page)</td>
<td>XXX</td>
</tr>
</tbody>
</table>

**Note:** The table continues on the next page. The table rows and columns are as follows:

- **Table Columns:**
  - **Canadian Inuit**
  - **Sámi Swedish**

- **Table Rows:**
  - **Common property. Not in culture to own caribou or sell meat; share food**
  - **Not in culture to be in business – government is often service provider**
  - **My observation: Inuit preferred cooperative, community owned, or Inuit government owned. Few private entrepreneurs present**
  - **My observation & (Table split - continued on next page)**

**Additional Notes:**

- **Processes**
  - **Products**
    - Elders historical loss of knowledge of traditional use of caribou (extinction & residential school)
    - Shoot on the hoof
    - Language – lack of connectivity to external market/world
  - **Language – lack of connectivity to external market/world**
  - **Elders historical loss of knowledge of traditional uses, processes and products of caribou (extinction & residential school)**
  - **Elders historical loss of traditional knowledge of traditional uses, processes and products of caribou (residential school & wage economy)**

- **Cultural assets (customs, traditions, and Indigenous knowledge and language)**

**Observations:**

- Many Inuit entrepreneurs in formal economy and livelihood operators.
- Reindeer herders are registered businesses. *Samby* was a non-government administrative organisation (no Canadian equivalent).
Table 11.9 Key themes relating to the interaction of Inuit and Sámi culture on entrepreneurship (continued)

<table>
<thead>
<tr>
<th>Canadian Inuit</th>
<th>Sámi Swedish</th>
</tr>
</thead>
<tbody>
<tr>
<td>RI</td>
<td>CH</td>
</tr>
<tr>
<td>Elder consultation</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Consensus decision making</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>World View Capacity – More Holistic</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Kinship – Extended families working together, caring for each other and teaching others. Learning from grandparents, aunts &amp; uncles</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Indigenous Protocols – Consultation</td>
<td>✓ ✓ ✓</td>
</tr>
</tbody>
</table>

Legend: CH (Coral Harbour); RI (Rankin Inlet); J (Inukjuak); HVGB (Happy Valley-Goose Bay and North West River); J (Jokkmokk)

11.10.1 Acceptance of Selling

My findings indicated that within Canada, the Inuit values and attitudes toward caribou reflected that it was a common property and should not be owned. Meat sharing and exchange between families and other communities was the accepted norm. A critical concern was that many Inuit people lived in poverty and widely depended on the caribou as a food staple. If the caribou became commercialised, it would no longer be freely available to feed the poor. Further, over-harvested could deplete the herd and lead to extinction. They had experienced this with caribou and fish before.

An overarching issue was the large distances covered by migrating caribou and the effects of overharvesting devastatingly impacting on several communities. As the caribou migration often crossed provincial and territorial boundaries,
several levels of government and many stakeholders were involved in monitoring herd size and setting quotas for personal, community and commercial use. As the Southampton herd was viewed as unique or special because it does not migrate, the commercial caribou harvest was viewed as acceptable. However, the harvest purpose was primarily for herd management and not so much as an economic venture.

In Inukjuak, Nunavik, the private enterprise which had undertaken the commercial caribou harvest was discontinued. Several Inuit commented that selling caribou meat was not in their culture. It was acceptable to sell the shed antlers as well as carvings, clothing, art work and other items made using caribou parts. Nunavik Arctic Foods still conducted a commercial caribou harvest in another northern Nunavik community and its products were sold nationally and internationally.

A culture shift was starting to happen in Nunavut as some Inuit were now advertising caribou meat and products for sale on the radio (and later the internet). Selling wild caribou meat in the markets and over the radio had happened much earlier in Greenland. There appeared to be no difficulty with selling other products made from caribou such as carvings and clothing over the radio or internet.

In all Canadian Inuit communities and in Jokkmokk, Sweden; the interviewees noted that it was important to check with the Elders about what products could be sold and what information could be shared. This included sales of products to Indigenous and non-Indigenous customers. The Canadian Inuit in Rankin Inlet and Happy Valley-Goose Bay also noted that as Elders were being exposed to more economic development projects and they visited projects in other locations (even in other countries) their fears about the risks were being reduced as they saw how others had dealt with similar situations.

In an extension of this thesis research, some Inuit Elders in Coral Harbour when exploring possible opportunities for caribou had thought it could be used for treating medical conditions under certain conditions. They were interested in the
experimental work going on in Europe about reindeer bone being used to treat breaks and osteo-arthritis (Meis Mason, Anderson & Dana, 2012).

Other researchers have noted a pre-condition for a persisting Indigenous enterprise was that it should fit the social and cultural context of the community (Berkes & Davidson Hunt, 2012; Foley, 2005; Gombay, 2012; Zander et al., 2014).

11.10.2 Decision Making and Consensus

Decision making using consultation and consensus was valued and used by the Inuit and Sámi in all locations. Changes in use of reindeer and caribou for entrepreneurship and economic development involved widespread consultation and discussion (which generally took more time) before decisions were made.

The enterprises also reflected the importance of both individual and collective approaches. As collective societies, the community was viewed more importantly than the individual by both Inuit and Sámi. Therefore, individuals who did not follow the community consensus were discouraged. These findings were similar to those found for Indigenous entrepreneurship by Peredo and McLean, (2010), Swinney and Runyan (2007), Garscombke and Garscombke (2000).

Sámi indicated that decision making involving consensus was done differently in different families and sameby. Furthermore, voting could be used in certain circumstances. Some Swedish Sami also indicated that with the new enterprises consensus may no longer be appropriate as the Elders and community members had less knowledge to draw on. These would be an interesting topic for further literature review and research.
11.10.3 **Kinship and Social Capital**

In the Inuit and Sámi context, social capital was derived from community, family, extended family, and tribal or clan relationships. Kinship was very important.

Family hunting as a clan in Rankin Inlet illustrated the value of kinship. The kinship system is insuring food security by sending caribou to extended family members living in other Nunavut communities where the caribou supply had dwindled. The right to supply caribou to Inuit family members in other communities was embedded in the land claim settlement. Greer (2012) reported the community was sending 1500 pounds of caribou per week to Baffin Island. These actions and the ensuing discussions that are occurring in Nunavut and Coral Harbour are an excellent example of the inter-generational transmission of ideas, values, knowledge and skills” and illustrate the linkages of individual, family, community and society within the kinship structure (Arnakak 2000).

Because of the lack of economic development, the Canadian Inuit in Rankin Inlet, Coral Harbour and Inukjuak had few role models of successful entrepreneurs in their families and in their communities. The Swedish Sami had more role models to draw upon however these were not necessarily in the new economy. Having role models is an important determinant of Indigenous entrepreneurial success (Shoebridge, Buultjens & Peterson, 2012; Stewart & Schwartz (2007); Madiche et al; 2008; Todd, 2012; Foley, 2010).

The *sameby* in Sweden was clan and family based. Some reindeer herders expressed the need to have their children marry partners from other Sami communities to avoid genetic problems. This also applied to watching the blood lines of the reindeer stock which new Sami partners could bring into the marriage.

Both Canadian Inuit and Swedish Sami expressed that others might feel uneasy about their accumulating greater wealth through their entrepreneurial activities. This was similar to findings by Pascal and Stewart (2008) and Malkin et al. (2004). As discussed in section 11.8, the Canadian Inuit associated profit with
The negative side of kinship obligations was mentioned by few key informants in the Canadian Inuit communities. It was discussed in terms of a) family members of the clans in power receiving preferential treatment and b) kin expecting free or reduced priced goods and services from the enterprises. No Canadian Inuit voluntarily mentioned negative issues related to employing family and community members. No Swedish Sámi from Jokkmokk mentioned negative issues related to kinship obligations.

The Canadian Inuit and Swedish Sámi preferred similar enterprise partners or agencies owned and run by their own people. This suggests that opportunities are possibly limited by norms about trading with strangers (Harper, 2003). It also connects with recent research that suggest the families of Indigenous entrepreneurs may not be supportive of forming bridging networks with the dominant society to gain resources (Light & Dana, 2013; Foley & O’Connor, 2013; and Fuller et al., 2007).

However, in the entrepreneurial context, the Indigenous entrepreneurs are seeking social capital, business assets and business expertise from the dominant settler society networks (Foley, 2010). The Canadian Inuit in Nunavut, Nunavik, Nunatsiavut and the Northwest Territories have experience partnering with other Inuit and other non-Inuit companies for economic development in their regions. Carefully crafted income and benefit agreements and ongoing monitoring of their implementation and making needed adjustments have helped to ensure they receive significant benefit (Missens, Dana & Anderson, 2007; Meis Mason, Dana & Anderson, 2012; Moroz, Kayseas & Anderson, 2014).

11.10.4 Elder Knowledge

The interviewees in all sites (Canadian Inuit and Swedish Sámi) indicated that Elder knowledge was valued and sought after. In Canada, the Inuit viewed the Elders as the keepers of knowledge and teachers of it. Elder knowledge also dictated the cultural prohibitions on commercialisation of caribou.
The Sámi consulted with their Elders for advice on reindeer herding, the traditional processes, what aspects of culture could be shared, and what products could be sold to non-Sámi. Some Inuit and Sámi interviewees indicated that the knowledge may not be as useful for the new enterprises such as the Sámi IT project and tourism.

11.10.5 **Gender Roles**

Inuit women were often left out of studies of entrepreneurship and economic development or if mentioned it focused on the family and not its contribution within communities and societies (Peers 2001 & 1996; Nahance, 1997). Billson and Mancini (2007, xxii) also commented the majority of literature focused on Inuit male activities.

My findings showed that for Inuit and Sámi, men and women had different responsibilities but were inter-dependent on each other. In Canada, the Inuit men were involved in hunting and harvesting while the women traditionally did gathering and processing thus supporting the findings of Waschowich (1999). However, I was told that if a woman became responsible for her family she was expected to learn to hunt for their food. At the 2008 Inuit Studies Conference, I learned that if an Inuit family did not have boys to hunt they were given one by their kin or one of their girl children would become a boy.

More men were involved in the commercial processing of caribou. For example in Rankin Inlet, mostly Inuit men were employed in KAF’s meat processing facility. In Coral Harbour, the hunters were male; however, both men and women worked in the portable abattoir. In Inukjuak, the discontinued operation had primarily involved men. In Labrador, the commercial harvesting and meat processing operations were performed by men. Both men and women were involved in jewelry making. Women were seamstresses, clothing producers and doll makers. Few women appeared to be carvers. Men ran the outfitting, guiding, and eco-tourism operations. More women were involved in providing tourist accommodation and owning galleries.
PIWA (2004 and 2006b) and Stout and Kipling (1998) had reported that Inuit and other Aboriginal women faced structural barriers in economic development activities in accessing employment and financing, and creating their own business. Within the informal economy, Inuit women were accessing the available grants through the Hunters and Trappers Support Program. PIWA had received grants and was delivering workshops across Northern Canada to Inuit women on how to create their own businesses. However, at this time, I found few women with businesses listed on the Inuit Business Directory.

In Sweden, the Sámi also had interdependent roles. Traditionally men were reindeer herders which included hunting and fishing activities. Men also worked with “hard” horns, bone, and wood. Women traditionally gathered and processed food and made clothing. However, both men and women owned reindeer. Today the culture is shifting, I interviewed some female reindeer herders. As the profitability of reindeer herding was decreasing, women were encouraged to produce and sell crafts, clothing, and jewelry. They also were entering full-time and part-time wage employment. I was told that Jokkmokk had a higher proportion of male versus female entrepreneurs. My findings supported that of other researchers) who commented on the increase in demands and roles that Sámi women in reindeer herding were experiencing (Anderson, 1978; Kräik, 2002; Pettersson, 2002; Joks, 2007). Pettersson (2003) had indicated that more women were involved in the Sámi tourism industry.

11.10.6 Taboos/Prohibitions

Some Canadian Inuit and Swedish Sami in my research mentioned that taboos or prohibitions affected how they conducted businesses. However, they also mentioned that people were changing. Similar findings were reported by Frederick and Henry, (2003), Dana and Hippango (2011), and Helander-Renvall (2009).

Historically, the Inuit had various seasons which restricted the types of species which could be harvested. They also had traditional knowledge which said when they could be eaten or how certain parts could be used. I was told that “today
Inuit were a lot less suspicious of certain spiritual stuff.” The extension of my PhD research explored this further (see Meis Mason, Anderson & Dana, 2012).

The Sámi had traditional knowledge which affected what items could be gathered, the timing and conditions of gathering, and how these should be processed. At the Sami post-secondary institution, the students were taught about this in the handicrafts and reindeer programs. As was previously discussed, only certain Sámi knowledge could be shared with non-Sámi individuals. For example, several Sámi seamstresses indicated they could only sell Sámi kolte to a Sámi person. Others mentioned in Sami tourism the location of specific cultural sites and landscapes should not be shared.

11.10.7 Waste

All four Inuit communities in Canada and the Sámi community in Northern Sweden expressed the value that caribou or reindeer should not be wasted. Traditionally all the parts of the caribou and reindeer were used, even the blood, hooves, stomach and intestines. This extended into everyday Inuit and Sámi behaviours. For example, Inuit were frequently seen repairing their own snowmobiles. An Inuit carver used a cutter made from a worn out circular blade; a table was made from an empty spool of electrical wire; abandoned wooden packing crates became carving huts. Sámi used treads from snowmobiles to make loading ramps. Both Inuit and Sámi seamstresses used their scraps of skins and fabrics to make other products to sell.

Coral Harbour - Commercialisation of the caribou harvests had also resulted in burning the hides and bones or putting them in the ground. They looked for alternate uses of the antlers, bones and hides from the 3,000 harvested caribou. They sought buyers over the internet. Meat suitable for commercial use was put into the Hercules transporters. The remainder of the meat deemed suitable for human consumption was taken to the community for sharing. Some people mentioned if the harvest was located near the community, they would get some bones for the marrow.
In Canada, the commercial operations in Nunavut and Nunavik were required to undergo environmental impact analysis. As part of that process, the operations had to indicate the amount of waste and its impact on water, land, and community landfill. In Nunavik, Nunavik Arctic Foods had received complaints from communities about the waste from some commercial caribou harvests which had been left or put in the community dump.

My findings suggested that the commercial meat processing operations were searching for alternative products which would allow them to use the “waste” from the meat trimming in by-products such as jerky, mikku, sausages, and salami.

Jokkmokk – The Sámi meat processor mentioned that Sámi tastes were changing and they were now asking for specific cuts of reindeer. As they were hearing more about the dangers of fat, some people were asking for leaner cuts and the fat trimmed off. Stricter regulations were affecting how the reindeer were slaughtered and processed. These had resulted in redefining waste and increased disposal of reindeer parts in the landfill rather than using them for human consumption.

In summary, my findings suggest that as commercialisation was occurring tension was beginning to occur between the traditional Inuit and Sámi values and the demands of the market.
Both Inuit and Sámi saw themselves as resourceful, adaptable, flexible, solving problems, and creatively using their resources. The Inuit key guiding principle of *Qanuqtuurnngarniq* illustrated this. My findings clearly illustrated how Inuit and Sámi entrepreneurs altered traditional patterns of behavior by pursuing opportunities “beyond the cultural norms of their initial economic resources” (Foley, 2000, p. 11). Perhaps the strongest examples of this shift in Canada were the Inuit starting the commercial caribou harvests in the 1990s; more recently Inuit selling caribou meat over the radio and internet; and currently reducing or eliminating commercial caribou quotas to ensure food security across regions.

Some examples of discontinuities which changed the rules of the game and provided room for innovation included: 1) the Canadian government changing the regulations to allow the Inuit commercial caribou harvests in the mid 1990s, 2) the Inuit land claims settlements providing the right for Inuit to own, harvest and process the caribou as a traditional resource, 3) the Chernobyl disaster causing some Europeans to be concerned about contamination of reindeer meat thus opening up a market for caribou meat which has a similar taste and 4) development of the internet in both northern Canada and northern Sweden.

My findings provided many examples of Inuit and Sámi adaptation and innovations.

**Canadian Inuit**

- KAF reduced electricity use by putting double doors on ovens, used refrigeration trucks to store caribou sides, and applied sauces with hoses. KAF designed a new small scale facility with flexibility & HACCP which allowed them to achieve CFIA & EU certification. KAF’s product innovations included redesigning packaging, using distinctive yellow labels, providing restaurant portions, developing Inuit logo & brand, developing specific product for Nunavut market Inuit *mikku* and smoked caribou ribs, and adapting recipes for use with caribou. KAF repositioned by expanding their market from NWT to southern Canada; to the United
States and then to Europe. They then refocused on building the NWT market. Later, they pivoted and switched to a supplier from Greenland and increased the intake of musk-ox and arctic char.

- Coral Harbour was very innovative as the commercial harvest and initial meat processing in the portable abattoir had not done before. They improved hunting ability, learned new processes, and purchased new equipment. They also negotiated with the CFIA to allow traditional Inuit hunting instead of coralling the caribou. They brought more wildlife research into the harvest and meat process with wildlife biologists and staff on-site. By using big bombardiers and cat trains, they also reduced the environmental damage and cut costs. Finally, they had to cut-back on the commercial harvest and redirected their product to Baffin Island.

- Uncle Sam’s used the mail plane backhaul to reduce costs; added new freezers to extend inventory; redesigned the pulley system, facility and entry to transfer caribou easily; and purchased new processing equipment reduce manual labour and to speed output. They showed product innovation by adapting recipes for use with caribou and putting caribou products into local vending machines. They also had partnered with the NWRIA to provided the caribou skins. Uncle Sam’s was exploring the pet food market.

- Ipushin built a new facility, used Sámi reindeer herding, a wooden corral, and helicopters. They adapted a loading ramp designed for goats. They trained in meat processing and achieved CFIA certification. This was a significant innovation as it was a green field start-up with little employment outside government.

- Goodfellow-Baikie demonstrated radical process and product change by inventing and patenting caribou fur felt and the special fur felt machinery. She also did a prototype with the LIA and a pilot with the NWRIA using the caribou fur felt in gloves.

- Moving up in scale, adaptation and innovation were supported at the national and international levels through actions of PIWA and ITK as well as the Canadian government.
**Swedish Sámi**

- The reindeer herding demonstrated many process changes including tracking costs to ensure profitability; selective breeding; using helicopters, trucks, snowmobiles, ATV’s, GPS, satellite monitors, cell phones, radio collars; using ear tags in addition to fur marks and ear notches; and introducing a new gather corral. They also developed new partnerships with other sameby.

- A meat processor redesigned the facility, made process improvements, and invested in new equipment to meet increasing standards. It also developed new products to address changing customer needs.

- Craftspeople were developing new products and using non-Sámi materials and colours for non-Sámi customers. They also used large scale shop equipment and automated tools and sewing machines. They introduced the *duodji* brand, juried products for to assure quality and to reduce imitations and developed a store. Many craftspeople had internet sites to connect with the market. Upgrading of skills was supported through the Sami post-secondary institute.

- Sámi tourism operators were entering the tourism industry, participating in the new certification programs. They also were introducing specific cultural packages. The Municipality of Jokkmokk was involved in training new operators and working with several stakeholders to promote the Jokkmokk market and other tourism opportunities.

- An ITC company demonstrated radical innovation by provided consulting services and developed digital chips for monitoring reindeer.

- The Sámi post-secondary institute used the internet to deliver distance programs to young reindeer herders. It had developed a new Sámi culinary program. The institute was bringing together researchers, Elders, teachers and reindeer herders to problem solve and discuss improvements for the reindeer herding industry. They also were partnering universities an dpost-secondary institutions such as University of Umeå and the University of Tromsø and Sámi University College of Norway.
• Innovation and adaptation was also encouraged and supported at regional, national and international levels. For example, the Swedish Sami Reindeer Herders Association was a member of the Sami Reindeer Herders Association and the World Reindeer Herders Association. Both the Canadian Inuit and Swedish Sami are members of ICC. Canada and Sweden are both actively engaged in the Arctic Council, the United Nations, and the World Bank. Sweden’s membership in the European Union had resulted in increased funding to the Sami and opened new markets but also had raised agri-safety standards.

11.11 Learning from Others

My findings indicated that both Inuit and Sámi were interested in learning about each other and others. My literature review had shown that Inuit had participated with the Sámi in formal exchange workshops in the past sponsored by Canada Foreign Affairs and International Trade. The Inuit commented that they were beginning to learn about each other in Canada through Chambers of Commerce exchanges and the first Northern Lights Inuit Trade shows.

The Inuit in Rankin Inlet, Coral Harbour and Inukjuak wanted others to know the Inuit had always owned their land. They still worked with their hands and traditional tools to carve and sew. They paid taxes (unlike First Nations who live on reserves). They also wanted me to tell others about the changing of their names and the leather “dog tags” which they were issued during World War II, the slaughter of the dog teams, the involuntary relocation of some of their families to the extreme northern Arctic, and the destructive impacts of the Indian and Inuit residential school system. The Inuit suggested I write five cases focused on: 1) Inuit doll makers; 2) entrepreneurship related to seals; 3) entrepreneurship associated with the new Baker Lake mines; and 4) the Inuit quarry in Labrador which shipped stone to international markets.

The Inuit were also interested in learning about:

• Who are the Sámi people?
• What is their culture like?
• Why do the Sámi herd reindeer?
• Why do the Sámi sell reindeer meat?
• What kinds of things do the Sámi carve?
• How do they tan reindeer hides?
• What other products do Sámi make with reindeer?
• Why do Sámi reindeer skins not have warble fly holes?
• What tourism activities and products are the Sámi involved in?
• Are there alternative ways to reduce energy costs for Inuit and northern residents?
• How are First Nations people and Sámi involved in mining development? What are the impact and benefit agreements like?
• Is there prior learning acceptance and recognition? Are there different ways Inuit skills could be upgraded?
• What kinds of businesses had other Aboriginal people in Canada become involved in as result of their land claims?
• What other Aboriginal communities were doing about entrepreneurship and economic development in Canada
• How to deal with international scientists and academics coming to Inukjuak to look at the world’s oldest rocks?

The Sámi were interested in learning about the following:

• How I am able to do this very different and difficult research in another land and in another language?
• What other Indigenous people had I studied in other parts of the world?
• Who are the Inuit?
• What are land claim settlements?
• Did the First Nations and Inuit in Canada have any land claim settlements?
• How are Inuit and First Nations women treated?
• Were Inuit and First Nations people experiencing the impacts of the mining and forestry companies?
• What about the relationship of First Nations and Inuit people with particular mining and forestry companies?

• What were the environmental, economic, and social impacts of mining and forestry in Canada?

• What would be in impact and benefit agreements?

• Did the Indigenous people in Canada have the right to stop the mining, forestry and hydro power companies?

• Can one buy caribou meat in different parts of Canada?

The Sámi thought the Inuit could benefit by learning about the reindeer products as this might assist them in developing their economy. The Sámi allowed me to take pictures of the reindeer gather and separation to share with the Inuit. The Inuit were very interested in the vaccine to prevent warble flies. The Sámi were also interested in the possibility of reindeer herding in Canada and mentioned Sámi reindeer herders were in Scotland and South America.

11.12 Conclusion

Within Chapter 11, I have discussed the themes and compared them across the cases based on the exploratory research conducted in each Inuit and Sámi community. The findings were then linked back to the Indigenous entrepreneurship literature. There were many similarities between the Inuit and Sámi culture: such as collectivism and community, kinship and clans, respect for Elders, consensual decision making, a holistic world view, deep respect for the environment, and protection of their livelihoods and knowledge. The key difference was that the Canadian Inuit did not own caribou but these were wild and hunted on the commons whereas Swedish Sami owned and herded the reindeer. A second difference was that culturally Canadian Inuit do not sell caribou meat. A third difference was the contextual impact of such things as history, geographic location, climate, remoteness, and infrastructure. A fourth difference was the impact of government policies and practices with regard to Indigenous entrepreneurship and economic development.
These differences have resulted in very different trajectories and outcomes in Indigenous economic development and entrepreneurship from *Rangifer tarandus*. Whereas the Canadian Inuit still have a traditional sustenance economy, the Sámi have a history of entrepreneurial ventures and a well-developed reindeer economy. The Inuit have recently ventured into commercial caribou harvests and related meat processing. These were developed for caribou herd management, job creation and to build on traditional skills. Many of these ventures have suffered setbacks or discontinued. The Swedish Sámi have started more recently into small enterprise associated with tourism and IT. As reindeer herding had become less profitable, women and younger Sámi were entering the wage economy. Chapter 11 concluded by identifying topics which the Inuit and Sámi wished to learn more about.
12 Conclusion

In Chapter 12, I will 1) summarise the research objectives; 2) discuss the major findings of the research; 3) state the contributions and implications of the research for the field of Indigenous entrepreneurship, policy makers and education; 4) discuss limitations of the research; and 5) provide directions for further research.

12.1 Research Objectives

In Canada, recent land claim settlements have recognised rights of Inuit to benefit from traditional resources through hunting, harvesting, processing and trade. These settlements have also provided Inuit with capital for investment in business ownership and enterprise development. Self and community enterprises arising from traditional resources offer new opportunities for financial independence, self-reliance, personal empowerment and strengthening local Inuit and northern communities, families, and individuals. With globalisation and technologies associated with the new economy, smaller enterprises have new opportunities and choices to participate in accessing local, national and international markets. More opportunities for Inuit entrepreneurship also will arise as resource development occurs.

The primary objective of my doctoral research was to add to the knowledge and understanding of Indigenous entrepreneurship by working with communities pursuing entrepreneurship based on traditional economic activities, and specifically to increase the value of the commercial caribou harvests, related processing and products. This was accomplished by systematically studying the Canadian Inuit, Swedish Sámi and other non-Inuit and non-Sámi peoples’ use of Rangifer tarandus. By conducting field research in four Inuit communities in northern Canada and one Sámi community in northern Sweden, I was able to make comparisons thus gleaning deeper understanding and insights. The process involved looking at products, processes, markets and performance; identifying barriers the entrepreneurs had overcome; examining impacts of Inuit and the Sámi culture on the entrepreneurship, including Inuit and Sámi measures of success; and describing innovations and adaptations they had made.
I began sharing this information with the communities and academic scholars through presentations and papers. Some of these papers were translated into plain language English and Inuktitut and circulated in the northern communities so more Canadian Inuit could understand my research and its results. I also conducted further research with one Inuit community to examine the impact of Inuit culture on recognizing and developing new opportunities from the commercial caribou harvest (Meis Mason, Anderson & Dana, 2012).

I also participated as a research assistant in three other major research projects focused on Aboriginal entrepreneurship and economic development in Northern Canada.

12.2 Major Findings

The thesis has served to bring forward the voice of Canadian Inuit and Swedish Sámi people. The important conclusion of this PhD thesis is that context is extremely important in the study of Indigenous entrepreneurship. I demonstrated that both Inuit and Sámi have a long history of self-reliance and sustainable living based upon Rangifer tarandus as part of their food web. Indigenous peoples living at similar latitudes and making use of a similar species, yield different results. The choices of herding versus hunting Rangifer tarandus and using it for commercial enterprise had several explanatory variables including geography and climate, cultural propensity, government support and regulation, and infrastructure.

Climate and geography had significantly impacted on the nature and availability of resources. Short growing seasons combined with soil and snow conditions do not allow sufficient vegetation particularly the lichens to withstand intensive grazing and herding of caribou or reindeer in the Canadian Arctic. With climate change, the Canadian Inuit and Swedish Sámi reported warmer temperatures resulting in melting and refreezing of snow thus making it more difficult for caribou and reindeer to access their food. The Inuit had capitalised on the -20 degree Celsius winter temperatures in the design of the portable abattoir and the use of the outdoors as a freezer. Geography also affected the availability and cost of water and fuel for power, heat and light. The distance from other major
centers had directly impacted on profitability and sustainability by affecting market size, accessibility and transportation costs.

Culturally, the Canadian Inuit are hunters. They also believe that caribou should not be owned and until recently should be shared for food and not sold. Although the “entrepreneurial spirit” was demonstrated in hunting and trading, Canadian Inuit did not have much experience with business ownership as their economies were poorly developed and dominated by the government and southern Canadian businesses. In comparison, the Swedish Sámi became reindeer herders and traded reindeer and its products for several hundred years. Culture also affected the measures of success. Both Canadian Inuit and Swedish Sámi believed that enterprise survival was important. However success also meant their enterprises should assist their families and communities, develop the skills of the upcoming generation, and demonstrate sustainability of the land, water and resources. The Swedish Sámi appeared much more business oriented and more focused on increasing productivity and efficiency. Within the Inuit communities, Inukjuak was much more traditional and prided itself on not using power and shop tools in their carvings.

Both Canadian Inuit and Swedish Sámi used their traditional knowledge and wisdom in their businesses. They were concerned about intellectual property and product imitation by international competitors at lower prices. Pressures towards efficiencies and profitability were creating tension for maintaining the Canadian Inuit and Swedish Sámi traditional livelihoods. Both Canadian Inuit and Swedish Sámi cultures had traditional knowledge which they felt should not be shared with outsiders and this was demonstrated in their choices of products and clients. Both Inuit and Sámi entrepreneurs valued and used consensual decision making, consulting and learning from elders, kinship, holistic approaches, responsible stewardship and avoidance of waste, and preserving and transmitting their culture. Both Inuit and Sámi also saw their products and services as a way of transferring some aspects of their culture.

Government policies, programs, regulations, resource allocations, taxation, procurement and investment had played an important role in the development of
Canadian Inuit and Swedish Sámi enterprises. The law defined who qualified as a Swedish Sámi or Canadian Inuit and whether these were Indigenous peoples and had special rights. For the Swedish Sámi, the government determined the business opportunities they were allowed to participate in and the size or profitability of these businesses. For the Canadian Inuit, the land claim settlements established new rights and benefits. Both Canadian Inuit and Swedish Sámi had experienced more stringent regulatory standards and certification to protect food security and public health and safety. In Canada, the governments and the Inuit had developed specific research methodology and guidelines for working with Inuit and Nunavut required a special scientist research licence.

In Canada, special business registries had been developed to assist northern and Inuit businesses with preferential procurement for government-related contracts. Both Sweden and Canada had funded educational programs and workshops to develop business and trade skills and adapt to changing economic conditions. The governments also provided grants to Canadian Inuit and Swedish Sámi to assist with business start-up and purchasing of tools and equipment. In Sweden and Canada, the governments had made resource allocations for economic and business development officers. It should be noted that both Canadian Inuit and Swedish Sámi entrepreneurs paid taxes (this is in contrast to First Nations individuals and businesses in Canada which do not pay taxes when located on reserve lands).

Infrastructure including roads, utilities, water, sewage, buildings, etc. also played an important role in the development of Canadian Inuit and Swedish Sámi businesses. For example the shortage of housing was making it difficult for skilled people to return to the community and the lack of buildings also limited space for Inuit businesses. The Canadian Inuit communities lacked highways and roads and were dependent on air transportation and shipping (during the summer season) to provide access to the rest of Canada. Some Canadian Inuit communities also lacked financial institutions making it more difficult to arrange business loans or handle transactions.
A pre-condition of Indigenous entrepreneurship connected with wild-life is that
the resource base needs to be resilient to commercial-scale harvests. Since the
late 1990s, many caribou herds in northern Canada have suffered severe
population declines. Some subsistence harvests have been adjusted downward
or banned and commercial harvests have been reduced or stopped. The Swedish
Sámi reported that reindeer herding is facing challenges and many Sámi are
questioning its future sustainability.

12.3 Contribution of the Research

12.3.1 Contributions for Indigenous Entrepreneurship

Theory and Research

The thesis has served to bring forward the voice and perspectives of the Canadian
Inuit and Swedish Sámi in the field of Indigenous entrepreneurship. In building a
framework of Indigenous entrepreneurship, researchers should not be ethnocentric
or colonial and recognise that contextual differences exist among countries, within
a country’s regions, and among Indigenous peoples. My research about Canadian
Inuit and Swedish Sámi showed the need for approaches which recognise the
importance of the collective society or community and allow for individual,
family and community-based entrepreneurship. In the past, Indigenous
entrepreneurship research had generally focused on single communities or inside
a single country; my doctoral research illustrated the value of comparative case
studies within a country and between countries for gleaning deeper understanding
of the differences and similarities. Samples used in many research studies seemed
to include Indigenous entrepreneurs from different industries. By focusing on
Rangifer tarandus as a single resource input (both caribou and reindeer belong to
this group), my research holistically examined the resulting enterprises, processes,
products, markets and outcomes. Measures of Indigenous entrepreneurship in the
literature were generally drawn from those of non-Indigenous businesses and non-
Indigenous entrepreneurs. My research found Inuit and Sámi used multiple
measures of success such as social, political and cultural goals; removal of
barriers; not-for-profit or profit results; survival and growth; job creation; use and
preservation of traditional knowledge; leading “good lives”; social and health indicators; rebuilding communities; reasserting control over traditional territories; and environmental sustainability.

Canadian Inuit and Swedish Sámi had a history of trading and saw themselves as having entrepreneurial spirit. They also saw themselves as resilient, adaptable and innovative. Looking for historical examples and cultural values within the community’s context can provide a strong foundation of role models to build upon in entrepreneurial education.

The collective and traditional orientation of Inuit and Sámi may make it more difficult to pursue ventures which are radical or different or objected to by the community. Therefore, incremental innovation or activities deriving more value from the traditional resource or extending the business model forward or backward while creating more jobs for family members may be more acceptable.

Indigenous treaty rights to lands and resources are important in building the capacity for entrepreneurship. These traditional rights are a form of capital and allow access to lands and resources for development. On the other hand, they also provide the right to choose not to participate in entrepreneurial ventures and economic development projects. The criteria for making these choices may be more holistic, have longer time frames, and consider complex interaction of environment, economy and social impacts from larger scales.

Some major obstacles to successful Canadian Inuit and Swedish Sámi entrepreneurship were difficult, expensive and time consuming to change: providing supports for lifestyles and businesses, distance to markets and high transportation costs, lack of infrastructure, lack of capital, lack of personal savings or wealth experience, lack of skilled workers, and the dominance of government. Others, such as lack of business knowledge may be overcome with appropriate training and ongoing coaching.

12.3.2 Contributions for Indigenous Entrepreneurship Policy

Indigenous entrepreneurship policy differs among countries and regions. However, most social, educational, health, and economic indicators suggest that
Indigenous peoples are worse off compared to the majority non-Indigenous populations. This was certainly true for the Inuit as compared to the majority non-Aboriginal population in Canada and the Sámi as compared to the majority of the Swedish population.

My research found that government policy could hinder or support Indigenous economic development and entrepreneurship. Access to relevant education and training were fundamental in developing employability skills. Training was also important in reskilling workers to meet increasingly stringent international standards. Infrastructure development of communities was necessary to ensure sustainability of enterprises. Government supported business advisory services were valuable in helping to overcome a lack of business knowledge and improve connection to government programs. Recognizing and supporting the development of individual and community-based entrepreneurship was important. Start-up grants and loans helped overcome the barrier of access to capital. Encouraging public, private and NGO partnerships proved valuable in leveraging limited financial contributions. Land claim settlements in Canada had clarified ownership, rights and responsibilities as well as provided wealth and capital for Inuit investment. Inuit businesses and preferential procurement policies in Canada assisted in developing Inuit businesses and employment. Entrepreneurship policy should recognise that enterprises within Indigenous communities face multiple social, political and economic goals. Therefore, more complex measures of success and outcomes are necessary. Finally, incorporating both men’s and women’s perspectives and activities would strengthen the overall outcomes for communities.

12.3.3 Contributions for Indigenous Entrepreneurship

Education

Entrepreneurs build from their own knowledge and experience. Canadian Inuit and Swedish Sámi had knowledge of their traditional resources and their uses. Interviewees were concerned that this traditional knowledge was being lost. The Canadian Inuit were using their Elders as well as world-class professionals to develop harvesting, carving, doll-making and sewing skills. This also served as a
means to revive their knowledge. The Swedish Sámi were attempting to preserve and transmit their knowledge more formally through their post-secondary institution. Bringing together Elders, academic researchers and practitioners had resulted in better real world problem solving.

In developing the content for Canadian Inuit, Swedish Sámi and other Indigenous entrepreneurship training programs consideration should be given to what is taught, how it is taught, and who is taught. Canadian Inuit and Swedish Sámi both had a history of trading and saw themselves as having entrepreneurial spirit. Each saw themselves as resilient, adaptable and innovative. Using historical and current examples, role models, and the community’s cultural values and context would provide stronger foundations for entrepreneurial education. Learning from the experiences of those entrepreneurs who tried but discontinued their businesses is also important.

Western assumptions about entrepreneurship may not be appropriate in the context of the Canadian Inuit and Swedish Sámi. For example, content should include individual, family and community-based enterprises; economic and non-economic measures of success; and partnering with Inuit and non-Inuit organisations, agencies and governments. Perhaps rather than focusing on individual entrepreneurs, families or entire communities should attend the program. As Elders are often seen as the source of Indigenous knowledge, their role should be strengthened in entrepreneurship education. Because Indigenous youth are such a huge demographic, they should be specifically targeted for entrepreneurship education. Programs should also incorporate on-going mentoring to enhance the growth of new ventures. Finally, content should be delivered at the grassroots level in the local Indigenous language.

12.4 **Limitations of the Research**

Having indicated that my PhD thesis made an important contribution to the study of Indigenous entrepreneurship and, in particular, to the study of Canadian Inuit and Swedish Sámi entrepreneurship, there were some limitations to the research. One limitation was that I am non-Indigenous and was an outsider to all the
Canadian Inuit and Swedish Sámi communities. It was not possible for a non-Inuit/non-Sámi or non-Indigenous researcher to fully understand their Indigenous cultures and business practices particularly in the time frame available. The research might have been strengthened if I had Inuit and Sámi research partners. On the other hand, being neither Inuit nor Sámi allowed me to study both groups objectively without favouring one over the other.

A second limitation was that most interviews were conducted in Inuktitut or Swedish, the languages of the interviewees. As I understood neither language, I was totally dependent on local translation of the project description, the questions, the consent form and the research interviews. The local cultural guide/interpreter sometimes had to clarify the meaning and intent of the questions. The problem of language hampered establishing a relaxed atmosphere between myself and the interviewee. Listening to the digital recordings as I transcribed the English in the interviews, clearly demonstrated for me how much meaning was lost between the interviewees’ responses and the interpreters’ summaries. Having a local researcher partner familiar with the languages would have overcome this limitation.

A third limitation was the focused samples. Interviewees were asked to participate using a mix of identification and selection techniques: business directories, local community magazines, telephone directories, web listings, government contacts, and radio and personal solicitation. Some enterprises may not have been listed or identified. Adequate time was needed in each community to gain access and credibility. The use of snowball or chain sampling may have resulted in interviewees who were related to each other or who the community leader felt would portray the community in a positive light. If people were unavailable during the scheduled times, I was in the community or working with the interpreter, they may have been unable or unwilling to participate thus leading to an “inferior” case.

Finally, case research by its very nature explored in-depth a small number of phenomena so provided insight through rich detail. Therefore, it would not be valid to generalise the findings to other Indigenous communities or to other
Indigenous enterprises which used similar resources without conducting further quantitative studies on specific elements.

12.5 Directions for Further Research

Firstly, for future research partnerships, I would like the Canadian Inuit, Swedish Sámi and other Indigenous people to have a stronger involvement. This involvement could include participating in the application for funding, identifying research topics, developing project descriptions and questions, developing the research methodology, conducting interviews, transcribing interviews, recording and photographing their own business products and processes, helping to analyze the data, co-authoring papers, and translating the research results and articles into their Indigenous language.

The limitations outlined earlier combined with the practical experience of conducting exploratory multi-case comparative research also allow for reflection on possible future research in Indigenous entrepreneurship. These include:

- Identifying the key entrepreneurial skills of successful Canadian Inuit entrepreneurs within urban and remote settings.
- Using the internet and social networking tools to conduct larger scale survey research regarding specific elements of Canadian Inuit entrepreneurship.
- Examining other Canadian Inuit and First Nations entrepreneurs and their enterprises which arise from commercialising other traditional resources such as plants, marine fish, seal, walrus, and polar bear.
- Examining partnerships involving Canadian Inuit enterprises with other Inuit enterprises and other non-Inuit organisations including NGOs, government agencies, funding agencies, and non-Inuit corporations.
- Expanding the research to other Indigenous societies who use Rangifer tarandus, such as in Russia and China.
• Conducting longitudinal case studies of Canadian Inuit and Swedish Sámi entrepreneurs and their enterprises, particularly focusing on the characteristics of those which have survived and grown.

• Comparing First Nations and Inuit entrepreneurship in Canada within urban and remote settings.

12.6 Conclusion

To conclude, this research provides the perspectives and voices of Canadian Inuit and Swedish Sámi about entrepreneurship arising from the commercialisation of *Rangifer tarandus* (caribou/reindeer). Before, this research, only one major exploratory study had been done examining Inuit entrepreneurship in northern Canada (Dana, 1996). Many previous studies involving Inuit use of caribou had taken a resource management perspective (Dragon, 2002; Junkin, 2005; Nuttal et al., 2005). My doctoral research was the first study to use a holistic, descriptive case study approach to study Inuit and Sámi entrepreneurship using multiple sites within Canada and in Sweden as the international comparison. The knowledge gained may be useful to the Canadian Inuit and Swedish Sámi communities in deriving more value from their traditional resources. My thesis provides a valuable contribution to the field of Indigenous entrepreneurship. It also suggests policy directions governments can take to overcome inequalities and strengthen Indigenous entrepreneurship. Using the findings of this research may also enhance the teaching of entrepreneurship to Indigenous students in order to develop much needed future Indigenous entrepreneurs.
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14 Appendices
Appendix 14.1 - University Research Ethics Approvals

HDC Ref: 2006/55

5 October 2006

Ms Aslin, Helen, Mairi Mem
Management
UNIVERSITY OF CANTERBURY

Dear Aslin

The Human Ethics Committee advises that your research proposal "A Comparison Between Indigenous Sami Hunting of Reindeer Turtles and Indigenous Fruit Hunting of Kangaroo Turtles: Implications for Biodiversity and Conservation" has been considered and approved.

Yours sincerely,

[Signature]

Dr. Allison Lonsdale
Chair, Human Ethics Committee
DATE: May 29, 2007

TO: Adeline Meis Mason
    Room 685.5 Education Bldg

FROM: K. Arbuthnot
      Chair, Research Ethics Board

Re: A Comparison Between Indigenous Sami Herding of Rangifer tarandus and
Indigenous Inuit Hunting of Rangifer tarandus: Implications for Subsistence and
Commercialization

Please be advised that the University of Regina Research Ethics Board has reviewed your
proposal and found it to be:

☐ 1. APPROVED AS SUBMITTED. Only applicants with this designation have ethical
    approval to proceed with their research as described in their applications. For research
    lasting more than one year (Section 1F). ETHICAL APPROVAL MUST BE RENEWED
    BY SUBMITTING A BRIEF STATUS REPORT EVERY TWELVE MONTHS. Approval
    will be revoked unless a satisfactory status report is received. Any substantive changes
    in methodology or instrumentation must also be approved prior to their implementation.

☐ 2. ACCEPTABLE SUBJECT TO MINOR CHANGES AND PRECAUTIONS (SEE
    ATTACHED). Changes must be submitted to the REB and approved prior to beginning
    research. Please submit a supplementary memo addressing the concerns to the Chair of
    the REB. ** Do not submit a new application. Once changes are deemed acceptable,
    ethical approval will be granted.

☐ 3. ACCEPTABLE SUBJECT TO MAJOR CHANGES AND PRECAUTIONS (SEE
    ATTACHED). Changes must be submitted to the REB and approved prior to beginning
    research. Please submit a supplementary memo addressing the concerns to the Chair of
    the REB. ** Do not submit a new application. Once changes are deemed acceptable,
    ethical approval will be granted.

☐ 4. UNACCEPTABLE AS SUBMITTED. The proposal requires substantial additions or
    redesign. Please contact the Chair of the REB for advice on how the project proposal
    might be revised.

Sr. Katherine Arbuthnot

c. supervisor

**supplementary memo should be forwarded to the Chair of the Research Ethics Board at the
Office of Research Services (AH 505) or by email to research.ethics@uregina.ca

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Appendix 14.2 - Nunavut Science Research Licence

Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute
Box 1720, Iqaluit, NU X0A 0H0  phone: (867) 978-7129  fax: (867) 978-7109  e-mail: jcockwell@nac.nu.ca

June 26, 2007

NOTIFICATION OF RESEARCH

PLEASE BE ADVISED THAT SCIENCE RESEARCH LICENCE No. 0301207N-1 HAS BEEN ISSUED TO:

Aldene Metis Mason
Faculty of Business Administration
University of Regina
3737 Wascana Parkway
Regina, SK
S4S 0A2  CA
306 337-2394

TO CONDUCT THE FOLLOWING STUDY:

Inuit Entrepreneurship

SUMMARY OF RESEARCH:

One of three Inuit-specific in-depth cases about businesses from caribou to be part of a doctoral dissertation. Also, this case is part of "Mines, Pipelines and Caribou: Aboriginal Development in Northern Canada 'On Their Own Terms'" which explores the development context, objectives, activities and outcomes of three groups of Aboriginal communities. Communities have requested Northern specific research about traditional and emerging economy and also opportunity for their involvement and perspectives.

TERMS & CONDITIONS:

THE STUDY WILL BE CONDUCTED AT: Coral Harbour, Rankin Inlet

Jennifer Cockwell
Manager, Research Liaison

DISTRIBUTION:

NTI, Social and Cultural Department
KivIa, Social Policy
Coral Harbour, Mayor / SAO
Rankin Inlet, Mayor / SAO
Appendix 14.3 - Letters of Support

Ms Aldene Meis Mason
Faculty of Business Administration
University of Regina
Regina, Saskatchewan
Canada, S4S 0A2

Ms Meis Mason,

I heard about the research you are conducting about entrepreneurship and aboriginal peoples. This is very useful for the development of our communities.

You have undertaken a thesis on four in-depth holistic cases of Inuit communities and their entrepreneurship arising from the caribou. I support this because caribou is very important for Nunavik particularly by the fact that we have the largest herd in the world and caribou is a major part of our diet.

I encourage the people you have contacted to open their doors and to participate in your research.

I heard that the caribous in Mongolia are not reproducing by themselves for unknown reason. Could you tell me the name of the specialist who is working on this matter? I am very interested in what happened over there to prevent what could happen here?

Nunavik,

The Honourable Charlie Watt, O.Q.

Ottawa, March 28th, 2007
May 17, 2007

To Whom It May Concern:

"Key Factors for Entrepreneurship from the Caribbean"

This letter confirms the Canadian Council for Small Business' support for the above research project, pending Ethics Board approval from a Canadian university. The topic is important and helps promote the broader understanding and development of entrepreneurship in the Caribbean.

The author of the project (Alana Melin Mason) and her supervisors (Lawrence Dow, Robert Edmund and Alton Singer) are knowledgeable and very competent in every part of this research project and feel results will contribute to theoretical, practical, and policy implications.

The members of the Canadian Council for Small Business and Entrepreneurs will derive considerable benefits through feedback from the researchers. Our annual conferences, our newsletter entitled Business of Small Businesses and Entrepreneurship, and the practitioner's' extended network will offer an excellent forum for the researchers to disseminate their results to a wide audience of people interested in entrepreneurship in Canada.

If you wish to discuss this research, please contact me, Alana Melin Mason in our office at the University of Regina at 306-337-2010, ext. 2085. I would be happy to discuss it further.

Yours sincerely,

	

Jean-Marc Akong-Inclan

Associate Professor, Faculty of Business Administration
University of Regina
President, CCSBE-CCMED

An affiliate of the
International Council on Small Business

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Appendix 14.4 Project Description and Consent Form for Nunavut
(Inuktitut - Kivalliq Dialect)
7. The OECD is an international economic organization, primarily composed of 38 countries.
8. The International Monetary Fund (IMF) is a specialized agency of the United Nations
9. The World Trade Organization (WTO) aims to promote open trade and to reduce trade barriers.
10. The International Labour Organization (ILO) is the UN specialized agency focusing on labor issues.
11. The World Health Organization (WHO) is the UN specialized agency focusing on global health.
12. The United Nations University (UNU) is an international organization established by the UN.


data processing

1. The United Nations Conference on Trade and Development (UNCTAD) promotes trade and development.
2. The World Economic Forum (WEF) is an international organization aimed at improving cooperation among nations.
3. The International Chamber of Commerce (ICC) is an international organization that provides a platform for global trade.


data processing

The United Nations Educational, Scientific and Cultural Organization (UNESCO) promotes education, science, culture, and other areas.

The World Intellectual Property Organization (WIPO) promotes international cooperation in the field of intellectual property.

The World Tourism Organization (UNWTO) promotes tourism as a tool for peace and development.

The International Organization for Migration (IOM) promotes migration that promotes human mobility and development.

The International Labour Organization (ILO) is the UN specialized agency focusing on labor issues.

The World Health Organization (WHO) is the UN specialized agency focusing on global health.

The World Intellectual Property Organization (WIPO) promotes international cooperation in the field of intellectual property.

The United Nations Office for Project Services (UNOPS) provides technical assistance to UN agencies.

The United Nations Environment Programme (UNEP) promotes sustainable development and environmental protection.

The United Nations Development Programme (UNDP) provides technical assistance to UN agencies.

The United Nations Children's Fund (UNICEF) provides technical assistance to UN agencies.

The United Nations High Commissioner for Refugees (UNHCR) provides technical assistance to UN agencies.

The United Nations Volunteers (UNV) provides technical assistance to UN agencies.

The United Nations Women (UN Women) provides technical assistance to UN agencies.

The United Nations Population Fund (UNFPA) provides technical assistance to UN agencies.

The United Nations Industrial Development Organization (UNIDO) provides technical assistance to UN agencies.

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) provides technical assistance to UN agencies.

The United Nations Office at Geneva (UNOG) provides technical assistance to UN agencies.

The United Nations Industrial Development Organization (UNIDO) provides technical assistance to UN agencies.

The United Nations Office at Geneva (UNOG) provides technical assistance to UN agencies.

The United Nations Office at Geneva (UNOG) provides technical assistance to UN agencies.

The United Nations Office at Geneva (UNOG) provides technical assistance to UN agencies.

The United Nations Office at Geneva (UNOG) provides technical assistance to UN agencies.

The United Nations Office at Geneva (UNOG) provides technical assistance to UN agencies.

The United Nations Office at Geneva (UNOG) provides technical assistance to UN agencies.
For any questions about this project, you can call the Research Supervisor, Leo-Paul Dana, Associate Professor, Faculty of Management, University of Canterbury at phone 011-64-3-326-5570, or by email leop.dana@canterbury.ac.nz or Co-Research Supervise Professor Robert (Bob) Anderson by phone at 306-385-4728 or by email Robert.Anderson@uregina.ca or the Principle Investigator, Aldene Meas Mason, Lecturer, University of Regina, Faculty of Business Administration, phone 306-337-2381 or Aldene.measmason@uregina.ca

Participant Name (Printed) ___________________________ Organization ___________________________
Signature Date
Witness Name (Printed) ___________________________
Signature Date
Name of Principle Investigator ___________________________
Signature Date
Formulaire de consentement


**Titre succinct** : « L’entrepreneuriat faute provenant du caribou »

**Enquêteur principal** : Aïtène Meir Menon, BSc-MBA FCCHP

**Superviseur** : Professeur associé Leo-Paul Dunn, PhD, Faculté de gestion, Université de Canterbury, Christchurch, Nouvelle-Zélande

**Co-superviseur** : Professeur Robert B. Anderson, PhD, CSAI, Faculté des Affaires, Université de Regina, Regina, Saskatchewan, Canada

Nom, de

Adresse

J'ai lu la lettre d'introduction fournie par l'enquêteur principal, Aïtène Meir Menon.

J'ai bien compris tous les enseignements compris dans ce document.

J'ai compris tous les détails quant aux objectifs de ce projet.

J'ai compris que je suis libre de repousser ou de rejeter ce projet.

J'ai compris que je ne suis pas obligé de participer à ce projet.

J'ai compris que je ne suis pas obligé de participer à ce projet.

J'ai compris que je ne suis pas obligé de participer à ce projet.

J'ai compris que je ne suis pas obligé de participer à ce projet.

J'ai compris que je ne suis pas obligé de participer à ce projet.

J'ai compris que je ne suis pas obligé de participer à ce projet.

J'ai compris que je ne suis pas obligé de participer à ce projet.

Je comprends et je consens à être interviewé pour ce projet.

Je sais que je peux me retirer du projet à tout moment sans conséquences négatives.

Je comprends que les conséquences seront prises en compte pour que ceux-ci restent dans la mesure de cette recherche.

Je consens à ce que les données recueillies dans le cadre de cette recherche soient incluses dans la thèse de doctorat et puissent être publiées dans des articles ou encore présentées lors de conférences.

Formulaire de consentement - p. 2

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Appendix 14.5 - Consent Form for Inukjuak, Nunavik, Quebec (French)
Je comprends que ce projet a été approuvé par le comité éthique de recherche de l’Université de Canterbury, Christchurch, Nouvelle-Zélande et l’Université de Regina, Saskatchewan. Si j’ai des questions ou des inquiétudes quant à mes droits ou au traitement que l’on me fait en tant que sujet de recherche, je pourrai communiquer avec Dr. Katherine Arbuthnot, Présidente de l’Université de Regina au 306-585-4775, ou par courriel au research.ethics@uregina.ca ou à l’Université de Canterbury, Dr. Alison Loveridge, alison.loveridge@canterbury.ac.nz, ou par téléphone au phone 011-64-3-364-2981.

Pour toutes questions en lien avec ce projet, vous pouvez appeler le superviseur de recherche, Professeur associé Leo-Paul Dana, PhD; Faculté de gestion, Université de Canterbury, Christchurch, Nouvelle-Zélande au phone 011-64-3-326-5570, ou par courriel au leo.dana@canterbury.ac.nz; ou le co-superviseur Professeur Robert B. Anderson, Faculté des Affaires, Université de Regina; Regina, au 306-585-4728 ou par courriel Robert.Anderson@uregina.ca; ou Enquêteur principal Aldène Meis Mason, Lecturer, University of Regina, Faculty of Business Administration, au 306-337-2381 ou Aldene.meismason@uregina.ca

Nom du participant (Lettres moulées)______________________Entreprise_____________________________
Signature________________________________________Date_____________________

Nom du témoin (Lettres moulées)______________________
Signature________________________________________Date_____________________

Nom de l’enquêteur principal ________________________________
Signature________________________________________Date_____________________

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Appendix 14.6 - Project Description and Consent Form

(Swedish)

INTRODUKTIONSBREV

Jag ber dig att delta i min doktorsavhandling. Det handlar om att skriva tillstånd om kanadensiska insättningar utförda i områdena Nunavut, Northwest Territories, Labrador och Quebec. En samsby i Jakobsnord kommer att befolkas som internationell jämförelse.

Mitt fokus är utvecklingen av den kombinerade användningen av karibu (ren) – slakt, förädling, handel och förädling. Genom intervjuer lyssnar jag på berättelserna från jägare, entreprenörer, småföretagare, samhällskredser, äldermän och andra organisationer.

Mina forskningsfrågor har fokus på

- Varför har insättningar förändrat jägare medan samerna blev rekryterare?
- Varför har det inländska folket bara nyligen börjat välja rensätt och produkter på den internationella marknaden?
- Vilka produkter och vårdsättande förändringar görs av insättare och sommarer? Hur används och marknadsför de produktarna?
- Hur kan man jämföra det med den samiska erfarenheten?
- Hur har den inländska och samiska kulturen och traditionella samhällen påverkat infrastruktur, organisationer, förädling, företagande och synsätt på slakt, förädling och marknadsföring etc.?
- Vilka hinder har folkens mötts och hur har dessa övervanter?
- Hur har insättare och sommar mått framgången av dessa utmaningar?
- Vad kan insättare och sommar lära sig av varandra?

Detta har behöver inte närmare tid för en intervju som tar ungefär 60-90 minuter. Dessa intervjuer kommer att bli digitalt inspelade (som noterar), efter bandade. En ordböck kommer vid behov att användas som tolk.


Med vänlig tålmodighet,

Aldane Meis Mason
Biträdande Professor, Institutionen för Ekonomi, Regina Universitetet.
Regina, Saskatchewan
Kanada S4S 0A2
Telefon: (306) 585 2388
Mobil: (306) 585 1324
Fax: (306) 585 3361
E-post: aldane.mason@uregina.ca

Tempoät mobiltalnummer i Sverige:
073 – 804 10 17
Medgivandeavtal

Aldene Meia Mason FCMC CHRP
Birendne Professor
Institutionen för Ekonomi
Regina Universitet
Regina, Saskatchewan
Kanada S4S 0A2
Telefon: (306) 317 2381
Mobil: (306) 533 1124
Fax: (306) 585 5361
E-post: aldene.mason@uregina.ca
Temporär mobiltaln Numer i Sverige: 073 - 8041017

Folkstödlig titel på doktorsavhandlingen: En jämförelse mellan den samiska ursprungsbefolkningens skötsel av ren (Rangifer Tarandus) och den inuitiska ursprungsbefolkningens jakt på ren (Rangifer Tarandus): Betydelse för förstörning och kommersialisering.”

Kort titel: "Inuitiskt entreprenörskap baserat på karibun"

Huvudforskare: Aldene Meia Mason, BSc MBA FCMC CHRP, Doktorand,
Birendne Professor – Entreprenörskap.

Handledare: Högskoleelektor Leo-Paul Dana, PhD
Faculty of Management, University of Canterbury
Christchurch, Nya Zealand

Handledare: Professor Robert B. Anderson, PhD, CMA
Faculty of Business Administration, University of Regina
Regina, Saskatchewan, Kanada

Jag

Adress

Jag har läst det introduktionsbrev som givits mig av huvudforskare Aldene Meia Mason.
Jag förstod informationen som detta dokument innehåller.
Jag har blivit fullt informerad om detta projekts mål.
Jag förstår dessa mål.
Alla frågor jag ställt har fått tillfredställande svar.
Jag förstår att min delaktighet är frivillig, och väljer jag att inte deltaga ger detta inga negativa påföljder.
Jag samtycker till att bli intervjuad för detta projekt. Jag vet att jag får dra mig ut när jag vill utan negativa påföljder.
Jag godkänner att intervjun kan bli inspelad.
Jag förstår att åtgärder kommer att tas för att försäkra att denna intervju hålls konfidentiell, såvida jag inte ger mitt samtycke till att bli identifierad.
Jag samtycker till att forskningsmaterialet samlat genom detta projekt kan inkluderas i doktorsavhandlingen och kan bli publicerad i artiklar eller presenteras vid konferenser.

Jag förstår att detta projekt godkänts av Forskningsets Ethiska Råd vid Canterbury Universitet, Christchurch, Nya Zealand och Regina Universitetet, Saskatchewan, Kanada. Om jag har några frågor eller ärenden angående mina rättigheter eller behandlingen av mig som deltagare i detta forskningsprojekt, kan jag kontakta anläggningsansvarig Ethikskommitté Dr. Katherine Armbrook, Ordforande vid Regina Universitetet, på 306-585-4775, eller via e-post till research.ethics@uregina.ca eller till Canterbury Universitetet, Dr. Alison Loversidge, på 011-64-3-364-2981, e-post alison.loversidge@canterbury.ac.nz

Har ni några frågor angående detta projekt, kan ni ringa forskningshandledare Leo-Paul Dana, Associate Professor, Faculty of Management, Canterbury Universitet på telefon 011-64-3-326-5570 eller via e-post till leol.dana@canterbury.ac.nz eller forskningshandledare Professor Robert (Bob) Anderson på telefon 306-585-4728 eller via e-post robert.anderson@uregina.ca eller till huvudutredare, Aldene Meis Mæson på telefon 306-334-2381 eller via e-post aldene.meismason@uregina.ca

Deltagarens namn (texta) Organization
Underskrift Datum

Vitnesens namn (texta) Datum
Underskrift Datum

Huvudforskarens namn Datum
Underskrift Datum
Appendix 14.7 - Guidelines for Aboriginal Research in Northern Canada

| Recognises jurisdiction of the Indigenous peoples to their culture, heritage, knowledge, political & intellectual domains. | Specifies sponsors and sources of financial support, persons in charge and members of the project team, as well as specifying the needs for consultants, guides and interpreters; data gathering techniques and the uses to which they will be put; foreseeable positive and negative impacts of the research. |
| Recognises the partnership and participation of Indigenous peoples. | Provides accessible information in local languages and/or dialects. |
| Informs the appropriate community authorities of planned research. | Provides training & uses community members for meaningful work when possible so skills are transferred and they can work towards managing their own research. |
| Negotiates & formulates research agreements with appropriate Indigenous jurisdictions and waits for clear and informed consent before starting. | Obtains fully informed consent from participants & gives credit to those contributing to the project. |
| Specifies sponsors and sources of financial support, persons in charge and members of the project team, as well as specifying the needs for consultants, guides and interpreters; data gathering techniques and the uses to which they will be put; foreseeable positive and negative impacts of the research. | Preserves confidentiality or indicates when this is not possible. Respects personal privacy and dignity by providing anonymity unless people have agreed to be identified; where this isn’t possible, informs them of the possible consequences of being involved; participation of subjects, including the use of photography in research will be based on informed consent. |
| Research agenda advances community development, capacity building, and knowledge transfer. | Minimally disrupts community & family life. |
| Challenges assumptions and results based on previous research in the area. | Obtains review & release of information. |
| Presents many different viewpoints from each Aboriginal community. | Provides results in accessible ways using plain and traditional languages so participants can understand the meaning of the research and the implications to them. |
| Consults with communities and provides opportunities to participate during planning, execution and evaluation of results. This is a collaborative relationship and must allow communities to express interests. | Provides study materials which can be used by local teachers and placed in local community centres or museums. |
| Ensures participants receive some benefit. | Strictly observes all relevant federal, state/provincial/territorial and local regulations pertaining to cultural, environmental and health protection. |
| Makes serious efforts to include traditional and local knowledge and experience and use the language of the local people. | Does not disturb or remove sacred sites, cultural materials, and cultural property without community and/or individual consent and in accordance with all relevant federal, state/provincial/territorial and local regulations. |

Appendix 14.8 - *Inuktitut Living Dictionary*

There were no matched for words like entrepreneur.

barter - [English] translates to: δεοναγιάθ
barter object - [English] translates to:
κεαγιάθ; εγνάγισ
sell - [English] translates to: γιαγιάθ
means to make money - [English] translates to:
παρανογιάθ
self-Employed - [English] translates to:
αλαγισθ
Business Development Officer - [English]
translates to: αστικογισθ; αστικογισθ
Business Development Fund (BDF) - [English]
translates to: διαδοχικογισθ
Industry and commerce - [English] translates
to: ινδυσθ; ινδυς

Appendix 14.9 Dissemination of Research in Publications

Peer Reviewed Chapters & Cases in Published Books


Peer Reviewed Journal Publications


