

---

**Survey on Living Conditions in the Arctic:  
Inuit peoples of Labrador, Nunavik, Nunavut and the  
Inuvik region**

**Feasibility Study  
Draft**

---

**Special Surveys Division  
Statistics Canada**

**October 1, 1998**

# Table of Contents

<b>TABLE OF CONTENTS</b> .....	<b>1</b>
<b>1.0 EXECUTIVE SUMMARY</b> .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>2.0 INTRODUCTION</b> .....	<b>11</b>
<b>3.0 BACKGROUND AND OBJECTIVES</b> .....	<b>15</b>
3.1 BACKGROUND .....	15
3.1.1 <i>The Canadian Arctic</i> .....	15
3.2 OBJECTIVES .....	18
<b>4.0 PROJECT REQUIREMENTS</b> .....	<b>19</b>
4.1 TARGET POPULATION .....	19
4.2 UNITS OF ANALYSIS .....	19
4.3 PROPOSED LIVING CONDITIONS STUDY MODEL .....	20
4.3.1 <i>Living Conditions Model</i> .....	20
4.3.2 <i>Household Production Model</i> .....	21
4.4 CONSTRAINTS .....	21
4.4.1 <i>International Comparability</i> .....	21
4.4.2 <i>Respondent Availability</i> .....	22
4.4.3 <i>Respondent Burden</i> .....	22
4.5 MANAGEMENT OF INTERNATIONAL SURVEYS .....	22
<b>5.0 SURVEY DESIGN</b> .....	<b>25</b>
5.1 SAMPLING FRAME .....	25
5.1.1 <i>Beneficiaries' lists</i> .....	25
5.1.2 <i>Geography based frame</i> .....	26
5.1.3 <i>Sample frame for SLiCA</i> .....	26
5.2 SURVEY DESIGN .....	26
5.3 ASSESSMENT OF STATISTICAL RELIABILITY .....	28
5.4 SAMPLE SIZES .....	28
5.5 DATA COLLECTION METHODOLOGIES .....	30
5.6 DATA QUALITY .....	30
5.6.1 <i>Non-response</i> .....	30
5.6.2 <i>Minimum detectable differences</i> .....	31
5.7 SURVEY ESTIMATES .....	31
5.7.1 <i>Weighting</i> .....	31
<b>6.0 SURVEY ACTIVITIES</b> .....	<b>33</b>
6.1 COMMUNICATION AND CONSULTATION .....	33
6.1.1 <i>The source</i> .....	33
6.1.2 <i>The channels</i> .....	33
6.1.3 <i>The message</i> .....	34
6.1.4 <i>The audience</i> .....	34
6.1.5 <i>Feedback</i> .....	34
6.2 SCHEDULE OF ACTIVITIES .....	34
6.3 COST ESTIMATES.....	37
<b>7.0 PROJECT MANAGEMENT</b> .....	<b>41</b>
7.1 PROJECT TEAM.....	41
7.2 STEERING COMMITTEE .....	41
7.3 MICRODATA ACCESS .....	41

7.3.1	<i>Screened Microdata</i> .....	41
7.3.2	<i>Unscreened Microdata</i> .....	42
7.3.3	<i>On-Line Access</i> .....	42
<b>8.0</b>	<b>APPENDICES</b> .....	<b>43</b>
8.1	LIST OF INUIT ORGANIZATIONS IN CANADA.....	43
8.2	RESEARCH GUIDELINES FOR THE LABRADOR INUIT SETTLEMENT AREA .....	51
8.2.1	<i>Obtaining ethical approval</i> .....	51
8.2.2	<i>The consultation process</i> .....	52
8.2.3	<i>Ongoing review of ethical standards</i> .....	52
8.2.4	<i>Social, gender and cultural issues</i> .....	53
8.2.5	<i>Communication and consent</i> .....	53
8.2.6	<i>Community benefit or employment of local people</i> .....	54
8.2.7	<i>Ownership and publication of materials</i> .....	54
8.2.8	<i>Exploitation of community resources</i> .....	54
8.2.9	<i>Enforcement</i> .....	55
<b>9.0</b>	<b>BIBLIOGRAPHY</b> .....	<b>57</b>



## 2.0 Introduction

This document has been prepared in response to a request from the Université Laval. The purpose of this report is to examine several issues concerning the conduct of a household survey which would collect data on living conditions in Labrador, Nunavik, Nunavut and the Inuvik region. This study on living conditions is in fact part of an international study of the Arctic entitled the *Survey on Living Conditions in the Arctic: Inuit, Saami and Indigeneous Peoples of Chukotka* (or SLiCA), of which these four regions represent the Canadian Arctic. The other regions include Greenland, Alaska, Finland, Norway, Sweden, the Kola Peninsula, and Chukotka.

The initiative for SLiCA comes from Statistics Greenland. In 1994, Statistics Greenland conducted a Survey of Living Conditions in Greenland. Analysis of the data collected in this survey caused researchers in Greenland to re-examine some of their theoretical and methodological assumptions. It was eventually decided that any further research would require a new survey instrument designed specifically for Scandinavian countries in Arctic regions with large numbers of indigenous residents still engaged in some form of subsistence or traditional activities. They also concluded that it was more important to draw comparisons among Greenland and other Arctic regions rather than Greenland and European countries.

By 1997, Birger Poppel, Chief Statistician, Statistics Greenland and Thomas Andersen, Project Co-ordinator, Statistics Greenland began a campaign of international consultation to launch an international study of living conditions in the Arctic. In late May 1998, researchers from the six countries assembled in Slagelse, Denmark to establish the theoretical, methodological and organizational basis for SLiCA.

At Slagelse, the goals and objectives of the SLiCA project were presented and broadly agreed upon by all present. Given the objectives of the international study, this report discusses data requirements and presents survey design and data collection methodologies for conducting SLiCA in Canada. The costs associated with the proposed approach are estimates based on average costs obtained from organizations who have conducted similar surveys in the Canadian Arctic.

Readers requiring additional information on this feasibility study or SLiCA in general can contact the following persons:

At Université Laval

Gérard Duhaime  
Édifice Ernest-Lemieux  
Québec, (Québec)  
G1K 7P4  
Telephone: (418) 656-7596  
Fax: (418) 656-3023  
email: [gerard.duhaime@fss.ulaval.ca](mailto:gerard.duhaime@fss.ulaval.ca)

At Statistics Canada:

Tracey Bushnik  
5-B6 Jean Talon  
Tunney's Pasture  
Ottawa ON K1A 0T6  
Telephone: (613) 951-3017  
Fax: (613) 951-0562  
email: bushtra@statcan.ca

Richard Veevers  
5-C6 Jean Talon  
Tunney's Pasture  
Ottawa ON K1A 0T6  
Telephone: (613) 951-4617  
Fax: (613) 951-0562  
email: veevers@statcan.ca

## **3.0 Background and Objectives**

### **3.1 Background**

The indigenous peoples of the Arctic have a number of economic, cultural and technological conditions in common. In many cases they still pursue traditional activities and depend on natural resources for their livelihood. However, conditions affecting indigenous populations in the Arctic have changed rapidly in the last century. As the conditions have changed, so have the peoples' lifestyles. Many indigenous people now mix traditional activities with paid work. Adapting to these new conditions has not always met with success. Indicators show higher unemployment, lower income levels, poorer health and more social problems among the indigenous populations than among the rest of the populations further south. Further, these types of indicators are in many cases culturally biased and do not reflect the reality of conditions in the Arctic.

In general, research on the living conditions among indigenous people in the Arctic has been dominated by regional studies. There is a distinct need for a comparative investigation of living conditions across the Arctic. It is very important that this investigation include a research design based on the development of a battery of indicators for living conditions that are economically and culturally appropriate for the Arctic, and a statistically sound method of sampling in the Arctic.

#### **3.1.1 The Canadian Arctic**

There are four regions in Canada to be included in this study. They are Labrador, Nunavik, Nunavut and the Inuvik region.

##### **Labrador<sup>1</sup>**

There are approximately 3,700 Inuit people living in Labrador according to the 1996 Census. They are the largest Aboriginal group in Newfoundland and Labrador representing 15% of the population.

About 60% of Labrador Inuit people live in one of five small communities on the north coast. The rest live primarily in Central and West Labrador with a few settled in other parts of Canada. About one quarter of these people speak Inuktituk although many more can understand it.

Fishing, hunting and trapping have historically been important activities. In the past few years, the discovery of nickel, copper and cobalt at Voisey's Bay has created the potential for mineral exploration and development.

There does not yet exist a land claims agreement between the Labrador Inuit people and the Newfoundland and Canadian governments.

---

<sup>1</sup> Background information for Labrador sourced from the Labrador Inuit Association's website.

## **Nunavik<sup>2</sup>**

The Inuit territory of Nunavik is approximately 660,000 square km, making up 1/3 of the province of Quebec. The 1996 Census enumerated approximately 7,700 Inuit people (88% of the population) in Nunavik living in 14 communities. These communities are not linked by road. Air service provides the only year-round link between the communities and elsewhere.

Inuktituk remains the dominant language spoken by the Inuit people in Nunavik. Students are taught in Inuktituk until the third grade, at which time they choose a second language. The Inuit language and culture continue to be taught throughout primary and secondary school.

Mining and hydro-electricity are the key industries in Nunavik. These industries factored greatly in the negotiations that took place between the Inuit and Cree and the Quebec government in the early 1970's.

On November 11, 1975 the Nunavik Cree and Inuit signed the James Bay and Northern Quebec Agreement. For the Inuit people, this agreement covers three main areas. First, Inuit people gained special rights of land ownership and use including hunting, fishing, and trapping rights over the entire territory. Second, public institutions were created. Third, the Inuit people obtained monetary compensation in the form of a heritage fund that was to be administered by an Inuit corporation.

## **Nunavut<sup>3</sup>**

Nunavut is a large territory covering 1.9 million square kilometres. This is equal to about one-fifth of Canada. Approximately 45 percent of the land area lies on the northern part of Canada's mainland. The rest is distributed among hundreds of islands including Canada's largest, Baffin Island. According to the 1996 Census, there are approximately 25,000 people living in Nunavut, of which about 83 percent are Inuit.

There are three regions to Nunavut: Baffin, Keewatin and Kitikmeot. The history of the three regions differs considerably as does the language. In Baffin, Keewatin and the eastern part of Kitikmeot, the language is written in syllabics whereas in the western part of Kitikmeot it is written in Roman orthography. This orthography is being used in an attempt to standardize the language throughout the circumpolar world, a process that is still ongoing.

Nunavut will become its own territory on April 1, 1999. The idea to divide the Northwest Territories (NWT) into two new territories was first introduced as a bill in the federal House of Commons in 1965. In 1966, the three-man Carrothers Commission recommended that the issue be further examined in ten years. Ten years later, the Inuit people started to force the issue of the division onto the agenda of the Northwest Territories (NWT) Legislative Assembly. The territorial government finally agreed to put

---

<sup>2</sup> Background information on Nunavik sourced from the Makivik Corporation website.

<sup>3</sup> Background information for Nunavut sourced from the Nunavut Handbook website.

the question of division to the residents of the NWT in a plebiscite in April 1982. The overall result was 53 percent for division and 47 percent against.

Years of negotiations ended in 1992 when an agreement was reached on the boundaries of the two new territories. Another plebiscite vote resulted in ratification of the boundary. In the meantime, the negotiations on a final lands claim agreement were also reaching the end. In a meeting between the Inuit leadership and Indian and Northern Affairs Minister Tom Siddon in September 1992, the Inuit people stated that the signing of the final agreement would not take place without the creation of Nunavut. The provision for Nunavut was then added and the final agreement was ratified by the Inuit people and the Nunavut Act passed by Parliament in June 1993.

The provisions of the Act to Inuit beneficiaries include: funds to be administered by the organization overseeing the claim - Nunavut Tunngavik Incorporated - for the collective benefit of all Inuit people in Nunavut; collective title to approximately 350,000 square kilometres of land, of which roughly 10 per cent include subsurface mineral rights; establishment of a series of co-management boards to work alongside the Nunavut government; and a commitment to create a Nunavut Territory and a Nunavut Government on April 1, 1999.

#### **Inuvik region<sup>4</sup>**

The Inuit people living in the Inuvik region called themselves “Inuvialuit” or “real human beings”. Their homeland stretches from the Alaskan border east to Amundsen Gulf and the western edge of the Canadian Arctic Islands.

According to the 1996 Census approximately 3,200 Inuvialuit live in the Inuvik region where they represent about 55% of the total population. Most if not all Inuvialuit are of mixed Alaskan and local descent although some families identify more with one heritage than the other. The Aboriginal Inuvialuit dialect *Siglitun* survives best in the more easterly communities like Tuktoyaktuk, Paulatuk and Sachs Harbour while the dialect of the Alaskan *Uummarmiutun* is spoken primarily in Aklavik and Inuvik.

Although the Inuvialuit traditionally hunted bowhead whale and caribou, the 20<sup>th</sup> century has brought significant changes to their way of life.

In 1984, the Inuvialuit became the first Aboriginal Canadians from the Northwest Territories to negotiate a comprehensive land claims settlement with the government of Canada. In what was called the *Inuvialuit Final Agreement* (IFA) they retained 35,000 square miles of surface ownership, 5,000 square miles of which include mineral, petroleum and natural gas rights.

---

<sup>4</sup> Background information for the Inuvik region sourced from the Inuvialuit Regional Corporation website, author Dr. David Morrison.

### **3.2 Objectives**

The two main global objectives for SLiCA presented and agreed to in Slaglese are:

1. To describe the living conditions of Inuit and Saami populations in the Arctic including both the common aspects of living conditions (as already established in previous research) and the specific welfare priorities of each group; and,
2. To make dynamic analyses of the causal relations between individual well-being and different political, economic, cultural and technological settings.

There are also two outcomes expected from the project:

1. Development of a new research design for comparative studies of the living conditions of Inuit and Saami peoples in the Arctic; and,
2. Establishment of a network of researchers and research institutions engaged in Arctic social science.

## **4.0 Project Requirements**

### **4.1 Target Population**

For the purposes of SliCA, the target population has been defined as all civilian, non-institutionalized Inuit people aged 16 years and over who live in Labrador, Nunavik, Nunavut, and the Inuvik region.

The Nunavut region is considering increasing the scope of the study in that region to include non-Inuit people. If the study is expanded in Nunavut, the target population would include both Inuit and non-Inuit people aged 16 years and over.

Many surveys conducted in Canada and other countries select and interview persons under the age of 19. However, depending on the sensitivity of the topics included in the questionnaire, it may be advisable or community groups may insist that parental consent be obtained prior to interviewing persons 18 years of age or younger. The most appropriate strategy can only be determined when the questionnaire content and specific questions are developed.

### **4.2 Units of Analysis**

The primary unit of analysis proposed for the international study is Inuit individuals aged 16 or over living in the geographic areas selected. Depending on the topics included in the questionnaire estimates on measures of health, societal participation, social relationships and demographic characteristics are examples of the types of estimates that could be obtained for an individual.

While the primary unit of analysis is the individual, it is important to understand that northern Inuit communities are based on a mixed economy comprised of market and subsistence or traditional activities and transfer payments. Focusing on the individual will not provide a complete picture of the living conditions.

In these communities individual, household and community activities are interdependent. Therefore, to better understand living conditions in these Arctic regions additional information will need to be collected regarding household activities and transfers. For estimates of these activities and transfers the household will be the unit of analysis.

As Usher<sup>5</sup> and others have noted, "The household is commonly the basic unit of both production and consumption." As a result, in these Inuit communities households combine functions that in strictly market based economies are for the most part undertaken by firms and individuals separately.

---

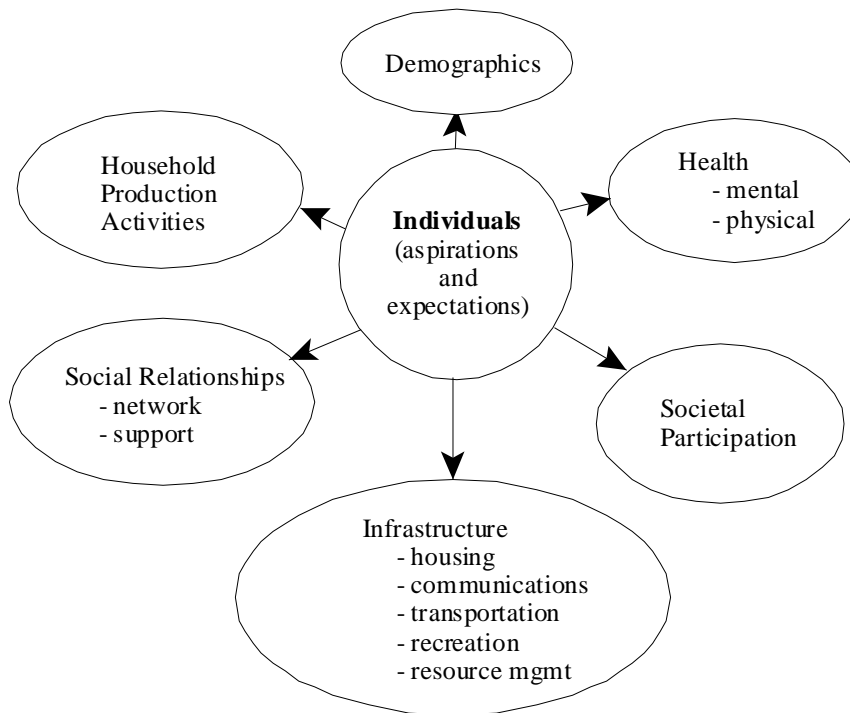
<sup>5</sup> Usher and Weinstien, (1991), page 7

### 4.3 Proposed Living Conditions Study Model

The model presented in this feasibility study was developed by Peter Usher and discussed at the “Workshop on the Proposed Survey of Living Conditions in the Arctic”. Previous versions of this model have appeared in Usher and Weinstein (1991) and Usher (1992).

#### 4.3.1 Living Conditions Model

The model suggests obtaining information about individuals’ aspirations and expectations regarding certain aspects of living conditions in the Arctic.

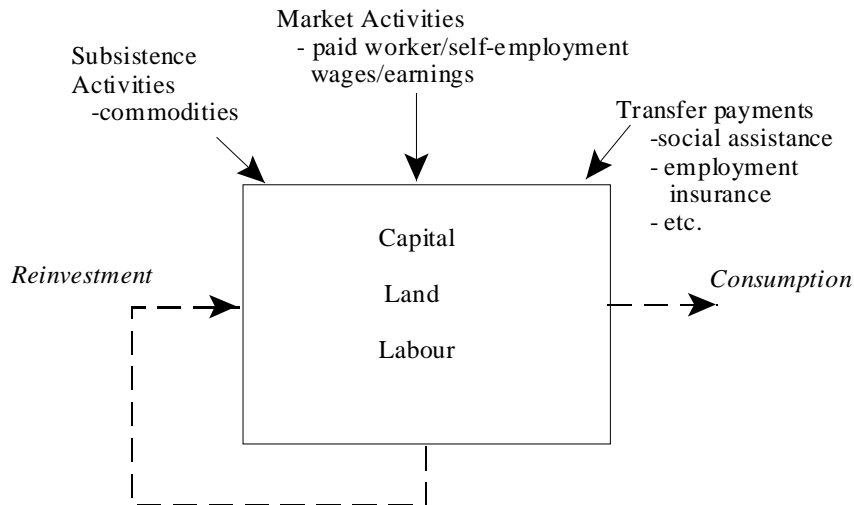


This approach also suggests collecting information on the contribution of the individual to household, market and subsistence activities. Since the household works as a small enterprise, it is important to understand the role that each individual plays in the functioning of the enterprise. To do this, it is necessary to obtain more information about household activities.

### 4.3.2 Household Production Model

The model presented depicts the household in a mixed subsistence and market economy with public and private sectors. Again the model follows closely on the previous work of Usher and others.

#### Household Production



The more information that is obtained regarding the functioning of the household the more complete will be the picture of living conditions. Most studies to date have focused on either obtaining estimates of the contribution of subsistence activities to the household or more standard indicators associated with market activities. The proposed model would yield a more comprehensive understanding of how the individuals and households function in the Arctic.

#### 4.4 Constraints

There are a number of constraints to the project that should be considered.

##### 4.4.1 International Comparability

It is important to remember that this study of the Canadian Arctic is part of a larger international survey. It is imperative that the regional data obtained in Canada be comparable to the data collected from the other Arctic regions. To ensure this comparability, the following should be taken into account:

1. The target population must be the same in each country/region.
2. Similar sample designs should be used in each country/region. The closer they are to each other, the more comparable the data. At minimum, each design should be a

probability sample, thus reducing non-response bias, and be statistically and scientifically correct.

3. Each country/region should adhere to a minimum sample size requirement. This will ensure that at least a certain level of analysis will be possible within each country/region and that certain data items will be valid for international comparison.
4. Data collection periods should be of similar length and finish at the same time. Similarly, reference periods should be of the same length of time.

#### 4.4.2 Respondent Availability

Response rates to any survey conducted in the Arctic are strongly correlated with the time of year the survey is in the field. In the summer, no one is home and therefore response rates are low. Conversely, response rates in the winter are high. This relatively small window of time for data collection has serious budget and scheduling implications.

#### 4.4.3 Respondent Burden

Beginning in 1998, there are a number of Statistics Canada surveys that will be interviewing some or all of the Inuit people in the Canadian Arctic. It is quite possible that a certain number of Inuit people will be selected to participate in more than one of these surveys. This has response rate and cost implications for all the surveys including SLiCA.

In addition, in order to minimize respondent burden and maintain good respondent relations it will be extremely important for Statistics Canada and the organizers of SLiCA to co-ordinate field activities. The surveys and tentative timing of data collection activities are indicated in the following table.

**Table 1: Tentative Schedule of Surveys in the Canadian Arctic**

Annual	Survey of Household Expenditures
Late fall 1998	National Population Health Survey
Winter 2000	Youth in Transition Survey
Spring 2001	Canadian Census
Summer to winter 2001	Aboriginal Peoples' Survey

#### **4.5 Management of International Surveys**

It can be quite challenging to organize and manage an international survey. Different countries/regions may have unique data needs, different resources, and variable levels of expertise. The following will present two different types of management structures.

## **Decentralized Management Structure**

At the Workshop in Slagelse, it was proposed that the management structure of SLiCA include two groups: the first, an international technical-methodological group; and the second, an international group on Mutually Acceptable Approaches (MAA) concerned with contextualizing the survey and operationalizing the broad assumptions the group has developed. Both groups would have representation from each country/region.

The advantage of this type of organization is that each country/region's interests would be well represented. The disadvantage is that coordination and discussion are difficult when group members are spread across the world.

## **Centralized Management Structure**

In some cases, international surveys have adopted a more centralized structure to address the problems of co-ordination and planning. Under this structure, one country/region manages the study. The type of management can vary: it can be the overall management of the project or the statistical management of the project or a combination of both. This country would be responsible for establishing management and working groups to ensure that all the countries/regions have an opportunity to provide input to the project and obtain feedback.

A key task of statistical project management is data quality monitoring. In other words, all methodologies are verified to ensure that they are statistically and scientifically correct and compatible. This ensures that each participating country/region is on the same track from the outset. This is vital for the success of the project and the international comparability of the resulting estimates.

This type of management structure would be funded from a pool of money to which each participating country/region contributes. Each country/region pays for its own survey as well.

The advantage of this type of management structure is that only one country/region is responsible for the management of the project. This simplifies the flow of information and co-ordination of tasks. The disadvantage could be difficulties in conflict resolution should certain countries/regions feel their interests have not been taken fully into account. However, this situation also could arise with a decentralized management structure.

## **Considerations**

In Canada, the management structure recommended for SLiCA is one that ensures representation at the working group and management level of all the major stakeholders in the study.

At this time, content development appears to be taking place around the world. The feasibility of this should be reviewed.



## 5.0 Survey Design

### 5.1 Sampling Frame

Two sampling frames were considered for SLiCA. The first was beneficiaries' lists and the second was a geography based frame.

#### 5.1.1 Beneficiaries' lists

This type of list contains the names and some personal information of persons who are eligible for benefits as a result of a land claims agreement or some other kind of agreement negotiated with a provincial or federal government body. Inuit people in three of the four regions in Canada have a lands claim agreement, Labrador is still negotiating. Using this type of frame, the individual would be the selection unit.

The advantages of using beneficiaries' lists include:

1. This type of design is very efficient, thereby reducing the sample size needed for a given precision.<sup>6</sup>
2. With the personal information available on the frame - name, address, phone number, age, gender, ethnic background, etc. - it could be possible to stratify the sample prior to collection should specific subgroups be of interest.
3. A sample could be drawn from the frame that would have a very high probability of containing only Inuit persons. This would increase the chance of finding an eligible person in the selected dwellings thus reducing data collection time and costs.
4. Minimal or no listing would be required, again reducing data collection time and costs.

The disadvantages of using beneficiaries' lists include:

1. Not all the regions have beneficiaries' lists and therefore more than one methodology would have to be designed and implemented. This has time and cost implications.
2. It is difficult to judge the accuracy of the lists without testing, this also has time and cost implications.
3. The amount and type of information on each list could vary widely; this could be problematic when trying to apply a general sample selection and stratification strategy
4. The format of each list could also vary widely. It would be time consuming and costly to try and reconcile any differences.
5. Since the individual would be the unit of selection, some tracing would have to take place for someone who has moved.

---

<sup>6</sup> However, depending on the availability of interviewers, it may still be desirable to cluster the sample, which would then result in an increased sample size.

### 5.1.2 Geography based frame

This type of frame involves the selection of geographical units on the basis of prior information related to the survey, e.g. Census counts of Inuit people in this case. From these selected units, an exhaustive list of households is created. Households are then selected, and finally one individual is selected at random in each household.

The advantages of this approach include:

1. The same methodology would be used for the four regions of interest, which would decrease the time for sample design, as well as processing time and costs.

The disadvantages of this approach include:

1. Because of the limited amount of external information that is used, this type of design is not very efficient when compared to a simple random sample of people. This translates in a higher sample size needed for a given precision.
2. The household listing process is time- and staff-consuming.
3. The entire process of sample selection would have to take place over a longer period of time as it would be broken down in many steps.

### 5.1.3 Sample frame for SLiCA

For SLiCA, it was determined that a geography-based frame was the most appropriate. It allows for a homogeneous sample design for all four regions and employs a methodology that is cost effective.

## **5.2 Survey Design**

The proposed survey design is intended to produce estimates of individual and household characteristics for each of the four regions. Depending on the sample allocation between regional centres, large communities and medium/small communities, it is most probable that estimates of individual and household characteristics would be available for each of these geographic designations for all four regions combined.

The proposed design is a stratified three or four-stage clustered design where units of selection are respectively:

1. communities, or possibly parts of communities for the largest communities;
2. households;
3. individuals.

The four regions of interest; Labrador, Nunavik, Nunavut, and the Inuvik region, will be the main strata. Sub-regions may also be considered as explicit strata, as well as community size.

An example of stratification by size could be the following:

- stratum1: regional center;

- stratum 2: other large communities;
- stratum 3: small to medium-size communities.

As stated above, communities will be the primary sampling units (PSUs). They will be selected randomly within strata. The possibility of sampling with probability proportional to size will be investigated. In this case the size of the community would be defined by the number of Inuit people in 1996 as estimated by Census,.

Regional centers will be selected with certainty. All households located in the selected communities will be listed in order to create a household frame. This household frame will be used in the next sampling stage. In the largest communities, there may be an additional stage of sampling where parts of these communities (as defined by Census geography, e.g. enumeration areas) are sampled before household listing takes place. This will ensure that the listing process is kept manageable.

Prior to selecting communities it is suggested that communities primarily engaged in resource extraction activities be identified and excluded from the survey. In most cases, these communities are comprised of very few permanent residents of the Arctic. These are mainly bunkhouse communities where the companies fly in the labour force from other parts of Canada.

In the second stage of sampling, households will be randomly selected. One individual will then be randomly selected from each household after all eligible individuals have been listed. The process for selecting the individual will depend on whether the region is including only Inuit people in the target population or Inuit and non-Inuit people.

**Target population that includes all persons 16 years of age and over:**

For this option, all adults (i.e. 16 years of age and over) in the selected households are eligible, and the selected individual may be an Inuit or non-Inuit person. As a consequence, the expected number of non-Inuit people in the resulting sample is roughly proportional to their number in the communities that have been selected.

**Target population that includes only Inuit persons 16 years of age and over.** For this option, all selected households that are found to contain no Inuit persons aged 16 years or older are excluded.

In the remaining households, only an Inuit person aged 16 and older is eligible. Therefore, the resulting sample is made up only of Inuit persons.

In terms of expected number of Inuit persons in the sample, there is only a slight difference between the two options. For a given selection of households, there should be a slightly higher number of Inuit persons selected in the second option. This is due to the fact that in households containing both Inuit persons and non-Inuit persons an Inuit person will always be selected. The proportion of households containing both Inuit and non-Inuit persons is estimated to be between 5 and 15% of all households. Since the exact proportions by region were not known at the time this document was written, it is assumed in the sample size calculations that the sample size for Inuit persons does not depend on the collection option chosen.

### 5.3 Assessment of Statistical Reliability

A measure suitable for specifying the reliability of survey estimates is the coefficient of variation (cv) of an estimated proportion, which expresses the standard error of the estimate as a fraction or percentage of the estimate itself. A formula for the cv is:

$$cv^2 = \left(1 - \frac{n}{N}\right) \frac{(1-p) deff}{p r n}$$

where  $n$  is the sample size,  
 $N$  is the population size,  
 $p$  is the proportion being estimated,  
 $deff$  is the design effect, and  
 $r$  is the response rate.

The design effect ( $deff$ ) is a factor that is introduced to account for the relative efficiency of the sample design actually used, as compared to a simple random sample (srs). A  $deff$  of 2, for example, means that the estimates will be on average only half as precise as when using a srs design.

In order to determine the required sample size from the above formula, one can specify the level of reliability required of estimates to be produced from the survey. Statistics Canada release guidelines are summarized in the following table:

Quality level	CV range	Comment
Acceptable	0.0%-16.5%	No warning required.
Marginal	16.6%-33.3%	Users should be warned about the high levels of error.
Unacceptable	33.4% and above	Not recommended for release.

Based on the above guidelines, it is recommended for this survey to aim for a cv of **16.5%** for proportions as low as **0.10**. Proportions higher than 0.10 will have a better precision, i.e. a cv lower than 16.5%. Proportions lower than 0.10, on the other hand, will have a cv higher than 16.5% and will need to be used with caution. For this reason, 0.10 is called a minimum estimable proportion, or *min p*.

In all calculations, a design effect of **2.0** is used. This value appropriately represents the type of multi-stage design that is suggested here.

### 5.4 Sample Sizes

Table A illustrates the sample sizes necessary to achieve the precision previously described, for estimates pertaining to individuals. The cv's illustrated correspond to a *min p* of 0.10. It is assumed that this precision is needed at the region level, for the Inuit population only. This requirement is indicated by the shaded cells. For example, a

sample size of 677 Inuit people is necessary in Nunavik in order to obtain a cv of 16.5% for a proportion of 0.10 of the Inuit population.

The last two columns of the table show what the total sample size (Inuit persons plus non-Inuit persons) would be if the proposed design of collecting data for both Inuit and non-Inuit people is chosen, and the cv's of the corresponding estimates. Resulting samples and cv's for the three sub-regions of Nunavut are also shown.

All sample sizes in Table A are called basic since they are the minimum sizes needed to meet the requirements at the region level.

**Table A: Basic sample sizes by region**

Region	Sub-region	Total pop 16+	Inuit pop 16+	Inuit sample	Inuit cv	Total sample	Total cv
Labrador		3000	2310	572	16.5	771	14.1
Nunavik		8690	7650	677	16.5	857	14.6
Inuvik		5760	3220	610	16.5	1188	11.7
Nunavut	Baffin	13190	10465	364	23.1	504	19.6
	Keewatin	6850	5990	208	30.5	254	27.6
	Kitikmeot	4640	4050	141	37.2	172	33.5
Total Nunavut		24680	20505	713	16.5	930	14.4
Total		42130	33685	2572	10.9	3746	9.2

In order to illustrate the impact of changing the basic requirements, Table B was created at the request of Nunavut. In Table B, the same precision requirements now apply to the sub-regions of Nunavut instead of Nunavut as a whole. As a result, the total sample size for Nunavut is now close to three times what it was in Table A (1987 vs 713 for Inuit people). Once again the shaded cells illustrate the level at which the requirements were met.

**Table B: Increased sample size for Nunavut**

Region	Sub-region	Total pop 16+	Inuit Pop 16+	Inuit sample	Inuit cv	Total sample	Total cv
Nunavut	Baffin	13190	10465	692	16.5	959	14.0
	Keewatin	6850	5990	663	16.5	807	14.9
	Kitikmeot	4640	4050	632	16.5	776	14.8
Total Nunavut		24680	20505	1987	9.1	2593	9.0

As a general rule, a sample size of roughly 600-700 Inuit people will be necessary to provide reliable estimates for any given level, e.g. region, sub-region, type of community, etc. The total sample size illustrated in Table B for Nunavut should permit them to also

obtain reliable estimates for three community sizes (large, medium, small), provided that each community size represent roughly a third of the population of Inuit people.

It should be noted that estimates pertaining to households will have better precision than estimates pertaining to individuals. This is due to the fact that the size of the sample of households is the same as the size of the sample of individuals, while the population of households is clearly smaller than the population of individuals.

## **5.5 Data Collection Methodologies**

The proposed data collection methodology is a personal interview with a randomly selected household member using a paper-and-pencil questionnaire. It is proposed that the interview be by non-proxy only.

Adopting the model of living conditions proposed in section 4.3 implies that data would be collected about individual activities and household activities. Selected respondents will be able to provide information on expectations and aspirations with respect to information on such topics as personal health, personal society participation, personal demographics, personal social relationships and personal contribution to household activities. However, this person may not be the most knowledgeable about household production activities in general, housing or resource management issues or the extent of government/household transfer payments.

In cases where the person selected is not the most knowledgeable, it will be important to identify the person most knowledgeable (PMK) and arrange a time when that person would be available to answer the questions in those sections of the questionnaire.

Things to consider:

1. Cost of personal interviewing: specific training, translation requirements, travel, etc.
2. The appropriateness of random sampling, i.e. availability of selected respondent (may be away hunting, fishing) or the possibility that the head of the household may insist on being the respondent.
3. Response burden of a personal interview.

## **5.6 Data Quality**

### **5.6.1 Non-response**

It is assumed that an overall response rate of **90%** will be attained, based on the experience of experts in surveys involving the same target population. An appropriate communications strategy will be put in place to help reach this figure.

In order to avoid clustered non-response, which would be the result for example of a whole community refusing to participate in the survey, a replacement strategy of communities will be built as an integral part of the sampling process. A community that refuses to participate will simply be replaced by another community with similar attributes (geography, type and/or size) and probabilities of selection will be modified to take the substitution into account. The communications strategy mentioned in section

6.1 should ensure that the number of such cases is kept to a minimum, so as to avoid any sizeable bias in the sample.

## 5.6.2 Minimum detectable differences

It is always of interest to the users to make comparisons between two sub-populations. Here comparisons between Inuit and non-Inuit people could be of particular interest. One question is: how large must a difference be in order to be statistically significant? For example, if 48% of Inuit people possess some characteristic, as well as 55% of non-Inuit people, is this 7% difference significant? The following table shows the minimum differences that will be expected to be statistically significant for a comparison of Inuit and non-Inuit people at the region level. It is assumed here that the sample allocation is as shown in Tables A and B where Nunavut gets the increased sample.

**Table C: Minimum detectable differences between Inuit and non-Inuit**

Region	Inuit sample	Non-Inuit sample	Minimum detectable difference (%)
Labrador	572	171	11.0
Nunavik	677	92	14.9
Inuvik	610	481	8.1
Nunavut	1987	367	7.9
All regions	3847	1112	4.7

These minimum differences should be viewed as conservative estimates. That is, any difference greater than the one in Table C is very likely to be significant. However, it is possible for smaller differences to also be significant. This is due to the fact that a 5% difference between 20% and 25% can be estimated with a better precision than a 5% difference between 50% and 55%. Since it would be too cumbersome to illustrate all possibilities, estimates in Table C were calculated to be on the conservative side.

## 5.7 Survey Estimates

### 5.7.1 Weighting

The survey design proposed for this study recommends interviewing a sample of residents in the Arctic rather than conducting a census of all residents. This approach is recommended for many reasons including considerations of cost, timing and response burden. Adopting the sample survey approach means that responses provided by each individual or household interviewed represent themselves or their household as well as several other individuals or households in the population with similar characteristics that were not interviewed.

The number of individuals or households that each interviewed person or household represents is referred to as the weight or weighting factor. When producing estimates from the data that represent the population, each of the characteristics estimated must be inflated by the weight.

This is especially true since none of the proposed survey designs are simple random samples. Therefore, in order for the estimates and analysis to be free from bias, survey weights need to be applied. The survey weights account for components of complex survey design such as stratification, multiple stages of selection or unequal probabilities of selecting respondents. Analysts should be aware that analysis or tables from the survey based on unweighted data may be misleading.

It is also recommended that all published estimates or other data releases contain estimates that have been rounded appropriately. Release of unrounded estimates implies more precision than can be attributed to the estimate.

## 6.0 Survey Activities

### 6.1 Communication and Consultation

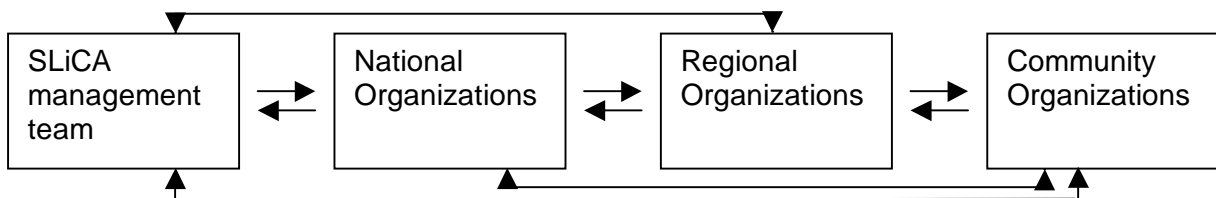
A study like SLiCA requires cooperation at many levels. There must be agreement at the national level that a project of this nature is beneficial to the Inuit people of the Canadian Arctic. The project must be understood and sanctioned at the regional level. And certainly, the communities within the regions must be consulted and their approval sought.

The consultation strategy for SLiCA is two-fold: one, to inform and gain the cooperation of the stakeholders and two, to ask for input into the survey instrument itself. The following describes some of the areas this two-fold communication strategy should address:

#### 6.1.1 The source

The individual/organization who presents SLiCA and asks for cooperation and input is extremely important. As can be seen below, there are a number of possible sources: (see Diagram 1 below)

**Diagram 1 Flow of information**



To help ensure that SLiCA is well received it is important that the different levels of organizations are informed of the project and brought into discussions as soon as possible. They in turn can speak to the Inuit people they serve, to explain and promote the project. The sanction of these organizations could help facilitate the implementation of the project in the Inuit communities. For a list of Inuit organizations, see Appendix 8.1.

#### 6.1.2 The channels

There are numerous channels that can be used to present SLiCA. The team must decide if they want to bring together people from all types of organizations (national, regional, and community level) and present the project, or present the project to one of the groups and rely on that group to communicate it to others.

Alaska is using a management board to help in communication and decision making activities. Perhaps this is a model that the four regions in Canada should consider. In each region, there could be a board made up of individuals from regional and community Inuit groups as well as the regional coordinator and his/her co-researchers. This board would be responsible for reviewing and approving all aspects of the project from

research guidelines to questionnaire content. The board members would be responsible for identifying any regional issues that need to be addressed, in particular with respect to social research. For example, in Labrador, the Labrador Inuit Association (LIA) has produced research guidelines for the Labrador Inuit Settlement Area (see Appendix 8.2 for a copy of these guidelines). It is important that the board members are the individuals who are well informed about these types of issues.

### 6.1.3 The message

The message is key in getting the stakeholders and participants to enthusiastically embrace the notion of a living conditions survey. The facts are:

- it is an international survey;
- it plans on employing non-standard means of measurement;
- it is specifically targeting Inuit people; and,
- a survey of this kind has never been done before.

However, it is important that everyone is also made aware of the main drawback of this type of survey. The fact is *that individual communities will not get any data that are for their community alone*. Estimates will be at the regional or perhaps subregional level. Unless a given community has the money to augment their sample, community level estimates will not be available.

### 6.1.4 The audience

It is important that the project team considers the different organizations, communities and individuals who may be directly or indirectly affected by this project and provides them with as much information as possible.

### 6.1.5 Feedback

The key element of this communication strategy is feedback. Everyone who is contacted with respect to this project should be afforded the opportunity to comment on the survey and its activities. Feedback could be requested on matters such as survey content, collection activities, the analysis plan, data publication, etc.

## **6.2 Schedule of Activities**

The following is a description of the types of activities that could take place over the next 26 months. The reader should take note that almost each activity is contingent on the ones preceding it. Should the timing or duration of one activity change, it may impact the rest of the schedule. Also note that as funding cannot be expected until the spring of 1999, there is a possibility that the activities scheduled before that date may be delayed until funding is secured.

Date	Activity	Details/Assumptions
September 1998	Draft feasibility study is distributed	The study should be reviewed by representatives from the four regions in Canada, the country coordinator for Canada and Alaska.
September 1998	Inuit organizations are contacted	The national Inuit organizations should be contacted to create/increase awareness of the project. They can help identify individuals and/or organizations within the regions to be contacted, who in turn can identify contact persons at the community level.
October 1998	Feasibility study is finalized	The Canadian team signs off on the feasibility study.
October 1998	NSF and SSHRC funding proposal is drafted	Canada and Alaska co-author a funding proposal - the draft is reviewed, finalized and submitted.
November 1998 until April 1999	NSF/SSHRC review period	It is assumed that the review period will take about six months.
November 1998	Ongoing communication with Inuit groups	<p>This communication involves:</p> <ul style="list-style-type: none"> <li>• describing the survey</li> <li>• explaining the process of getting funding</li> <li>• explaining the proposed methodology</li> <li>• asking for their future input into the content of the questionnaire should the funding be approved</li> <li>• preliminary discussions regarding the formation of regional management boards</li> </ul>
Begins November 1998	Development of survey themes	Done in conjunction with input from Inuit groups and is an iterative, ongoing process.
December 1998-April 1999	Establishment of management boards	With no funding yet available this activity may not be possible. However, if possible, the creation of management boards could take place during these five months.
April 1999	NSF/SSHRC funding approved	<b>Note:</b> <i>All other activities are contingent on funding approval.</i>
April 1999	Notify Inuit organizations that funding has been approved	Inuit organizations that have been made aware of the survey during the winter are notified that funding has been secured. If already created, the management boards are also notified.
May 1999	Notify/Meet with international team	This may be the time to determine which regions will be ready to proceed with the study.
May 1999-July 1999	Questionnaire development	Could involve meeting with the international group. Should involve input from Inuit organizations, management boards, etc.
August 1999	First consultative review	<p>Submit draft of questionnaire for review (includes Inuit organizations, management boards, etc)</p> <p>Must make review group aware of the international nature of the study and that all suggested changes may not be incorporated.</p>

September 1999	Revision of questionnaire	
October-November 1999	Pretest	<p>The pretest could be focus groups or a full-scale pilot. Focus groups could be used to see if the questionnaire works and if the respondents understand what is being asked of them. It is also the opportunity to find out what may be missing from the questionnaire and what could be deleted. The costs associated with doing focus groups can be anywhere from \$25,000 to \$50,000. Focus groups could be conducted within a month and revisions made to the questionnaire fairly quickly.</p> <p>A full-scale pilot is a mini-survey. This requires time for sample design, for listing, for data collection and for analysis. The costs associated with a pilot can range from \$100,000 to \$200,000. Things to consider: a pilot takes a lot of time and could not be completed within the October-November 1999 dates as shown. Therefore, should a pilot test be desired, the schedule would have to change to accommodate this. In addition, a sample that is selected for a pilot usually does not participate in the main survey.</p>
November 1999	Second consultative review	Based on the results of the pretest, the questionnaire is revised. This revised questionnaire is then sent out for review
December 1999	Final questionnaire is prepared	The questionnaire is finalized. Printing is arranged.
December 1999	Data collection strategy developed	Training packages are designed. The collection period is finalized. The search for interviewers begins.
December 1999	Sample selected	The sample is selected.
January 2000	Communities are notified of their selection	At this time, should a community refuse to participate, they will be replaced by a similar community
January 2000	Interviewer hiring	The hiring process of interviewers is completed.
February 2000	Listing	The listers go out into the field for one month.
February 2000	Interviewer training	While listing is taking place, interviewers are being trained.
February 2000	Questionnaires are sent to the regions	
March-May 2000	Data collection	Interviewers are in the field for 2 months for data collection.
March-May 2000	Data entry system	Entry specifications should be developed i.e. edits, imputation, etc.

	development	
March- June 2000	Data capture	Data capture takes place.
June- September 2000	Data processing	The file gets processed and cleaned.
September 2000- December 2000	Analysis takes place	The length of time required for analysis depends on the condition of the data.
January 2001	Preliminary data are released	

### **6.3 Cost Estimates**

Based on the schedule of activities, the following table represents the overall cost estimate for the project. Should any element of the project or schedule change, it will have an impact on the cost and the timing of activities.

The following assumptions have been made:

1. The sample sizes shown in section 5.4 in Table A indicate the number of interviews to be completed
2. On average two interviews per day
3. One month for listing
4. Two months for collection
5. Five days of interviewer training
6. One project manager per region
7. One regional coordinator per region
8. One translator per region - needed for translation of materials and in the field translation
9. \$17.00/hour for listers; \$17.00/hour for interviewers; \$20.00/hour for senior interviewers; \$22.00/hour for translators; and \$30.00/hour for project managers
10. 7.5 hour days
11. \$40.00 per diem per day
12. Overall travel budget for each region of \$75,000 for listing, interviewing, conferences, meetings, etc.
13. Pilot test estimate of \$200,000 and focus group estimate of \$50,000.

Salary	Number of people	Days	Daily rate	Cost
Principal investigator	1	240	\$416.67	\$100,001
Co-investigator	1	240	\$270.83	\$64,999
Regional coordinators	4	240	\$208.33	\$199,997
Project manager	4	240	\$225.00	\$216,000
Senior interviewers	15	55	\$150.00	\$123,750
Interviewers	28	55	\$127.50	\$196,350
Listers	22	24	\$127.50	\$67,320
Translators	4	132	\$166.67	\$88,002
Data capture	2	60	\$108.00	\$12,960
Data processing - junior	1	80	\$192.00	\$15,360
Data processing - senior	1	80	\$231.00	\$18,480
Analysis	2	80	\$224.00	\$35,840

### Travel

Travel budget	4 regions		\$75,000/region	\$300,000
Per diem				
Senior interviewers	15	55	\$40.00	\$33,000
Interviewers	28	55	\$40.00	\$61,600
Listers	22	24	\$40.00	\$21,120
Translators	4	55	\$40.00	\$8,800

### Supplies

	Units		Cost per unit	
Printing				
questionnaire	3000		\$1.50	\$4,500
training manual	75		\$3.00	\$225
field materials	75		\$5.00	\$375
Telephone	4	240	\$3.00	\$2,880
Postage				\$3,000
Freight				\$4,000

### Equipment

	Units		Cost per unit	
Computers				
for Regional coordinators	4		\$2,500	\$10,000
for Project managers	4		\$2,500	\$10,000
for Principal investigator	1		\$2,500	\$2,500

Total direct cost				\$1,601,059
Overhead (40%)				\$640,423
<b>Total costs</b>				<b>\$2,241,482</b>

Pretest - focus groups				\$50,000
<b>Total costs with focus groups</b>				<b>\$2,291,482</b>

Pretest - Pilot test				\$200,000
<b>Total costs with pilot test</b>				<b>\$2,441,482</b>





## **7.0 Project Management**

### **7.1 Project Team**

It is recommended that the Canadian portion of this study be designed and implemented by an inter-disciplinary project team. The project team should be comprised of those individuals responsible for the day to day activities of the project in the domains of study design, study management, study methodology, field operations, and data processing. Each of the regions of Inuvialuit, Labrador, Nunavik and Nunavut should be represented on the project team. This approach requires considerable input on the part of all groups at a sufficiently high level to make decisions concerning the subject matter, research plans, or operational aspects of the study.

### **7.2 Steering Committee**

It is also recommended that the day to day work of the Project Team be guided by a Steering Committee. The Steering Committee would be made up of senior study managers responsible for research and operational activities. Each of the four regions should also be represented on this committee as well as members of Inuit organizations. In order to co-ordinate the Canadian and Alaskan portion of the study, Alaska should be represented on this committee.

The Steering Committee would be responsible for approving the overall schedule of research and field activities, cost estimates and design strategies. The Steering Committee would also be responsible for ensuring the credibility of the study and overseeing the research and data dissemination activities associated with the study. This committee would establish guidelines and procedures to ensure that no data is released that would identify individual respondents, businesses or organizations.

### **7.3 Microdata Access**

#### **7.3.1 Screened Microdata**

Prior to releasing files for research purposes a review process should be established to ensure that no individuals could be identified, either directly or indirectly.

Variables that directly identify a respondent, such as name, address and telephone number should be removed from the files. Other variables such as demographics, labour force activity, income or language must be reviewed to ensure that unique combinations or rare characteristics will not directly or indirectly identify any individual. In such cases, the variables in question may be removed or collapsed to eliminate the possibility that any one individual can be identified.

It should be noted that the protection of confidentiality should be extended to include any particular individual, business, organization or product should not be released without the permission of the third party.

### 7.3.2 Unscreened Microdata

In some cases the suppressions imposed to protect individual or third party confidentiality may constrain the analysis proposed by researchers. Very often trade-offs are required between variables on the amount of data that can be provided. The released file may contain considerable detail for one variable, but only aggregated information for another.

If researchers know in advance that suppressions are likely to restrict the anticipated analysis the Steering Committee may want to consider an option that would enable the release of unscreened data.

If this is a consideration, at the time the questionnaire is being administered, the respondent could be asked to share their responses with researchers. In this case the secondary users should be identified. The respondent would be allowed the option to deny any sharing of his/her information.

### 7.3.3 On-Line Access

An alternative to asking respondents to share their data with researchers would be on-line data access. The purpose of on-line access would be to ensure that researchers have adequate access to all the survey data collected. With on-line access, researchers would be able to gain access to an "enhanced" public use microdata file and directly formulate and test statistical or retrieval code, including queries on confidential variables. The code for these custom tabulations could be transmitted electronically via the INTERNET, processed on a PC, the results vetted for confidentiality, and shipped back to the client.

The idea would be to offer this service to researchers who have obtained a copy of the screened microdata file. The microdata file would be structured to have a "place holder" for each of the confidential variables that have been suppressed. While researchers would not be able to access these variables on the screened microdata file, they would be provided with the relevant metadata that describes the variables and provides univariate distributions at the aggregate level. This would provide researchers with the information required to formulate hypotheses and write the required statistical programs to test these hypotheses.

An important consideration that will be critical to the success of an on-line access effort is the ability to provide quick turn around to user requests. One area that could impede quick service is the vetting of results to ensure that confidentiality of respondents has not been violated.

## 8.0 Appendices

### 8.1 List of Inuit Organizations in Canada<sup>7</sup>

#### **National Inuit Organizations:**

##### **Inuit Tapirisat of Canada**

Suite 510

170 Laurier Avenue West

Ottawa, Ontario K1P 5V5

Telephone: (613) 238-8181

Fax: (613) 234-1991

E-Mail: unavailable

Web Site: ITC does not yet have a web site but hope to have one soon.

##### **Inuit Circumpolar Conference (Canada)**

Suite 504

170 Laurier Avenue West

Ottawa, Ontario K1P 5V5

Telephone: (613) 563-2642

Fax: (613) 565-3089

E-Mail: [tuktu@magi.com](mailto:tuktu@magi.com)

Web Site: <http://apa.nunanet.com/directory.html>

##### **Pauktuutit - Inuit Women's Association of Canada**

192 Bank Street (2nd floor)

Ottawa, Ontario K2P 1W8

Telephone: (613) 238-3977

Fax: (613) 238-1787

E-Mail: [pauktuut@comnet.ca](mailto:pauktuut@comnet.ca)

Web Site: Pauktuutit does not have a web site.

##### **Inuit Broadcasting Corporation**

Suite 703

251 Laurier Avenue West

Ottawa, Ontario K1P 5J6

Telephone: (613) 235-1892

Fax: (613) 230-8824

E-Mail: [ibcicsl@sonetis.com](mailto:ibcicsl@sonetis.com)

Web Site: <http://www.tvnc.ca/Members/ibc.html>

---

<sup>7</sup> Please note that this list is not exhaustive.

**Inuit Art Foundation**

2081 Merivale Road  
Nepean, Ontario K2G 1G9  
Telephone: (613) 224-8189  
Fax: (613) 224-2907  
E-Mail: [iaf@inuitart.org](mailto:iaf@inuitart.org)  
Web Site: <http://www.inuitart.org>

**Tungasuvvingat Inuit**

(Inuit Community Centre)  
604 Laurier Avenue West  
Ottawa, Ontario K1R 6L1  
Telephone: (613) 563-3546  
Fax: (613) 230-8925  
E-Mail: [staffit@tungasuvvingat-inuit.ca](mailto:staffit@tungasuvvingat-inuit.ca)  
Web Site: Tungasuvvingat Inuit does not have a web site.

**Labrador Inuit Organizations:****Labrador Inuit Association**

P.O. Box 70  
Nain, Labrador A0P 1L0  
Telephone: (709) 922-2942  
Fax: (709) 922-2931  
E-Mail: unavailable  
Web Site: <http://www.cancom.net/~franklia/main.html>

**Labrador Inuit Development Corporation**

P.O. Box 1000, Station "B"  
(or 215 Hamilton River Road for courier)  
Goose Bay, Labrador A0P 1E0  
Telephone: (709) 896-5834  
Fax: (709) 896-8505  
E-Mail: unavailable  
Web Site: Information on the Labrador Inuit Association's affiliates is available on the LIA web site.

**OKalaKatiget Society**

P.O. Box 160  
Nain, Labrador A0P 1E0  
Telephone: (709) 922-2955  
Fax: (709) 922-2293  
E-Mail: unavailable  
Web Site: <http://www.tvnc.ca/Members/os/html>

**Labrador Inuit Health Commission**

General Delivery

Nain, Labrador A0P 1L0

Telephone: (709) 922-2114

Fax: (709) 922-2216

E-Mail: unavailable

Web Site: Information on the Labrador Inuit Association's affiliates is available on the LIA web site.

**Torngâsuk Cultural Centre**

General Delivery

Nain, Labrador A0P 1L0

Telephone: (709) 922-2158

Fax: (709) 922-2863

E-Mail: unavailable

Web Site: Information on the Labrador Inuit Association's affiliates is available on the LIA web site.

**Nunavik Inuit Organizations:****Makivik Corporation**

650 – 32nd Avenue

Lachine, Quebec H8T 1Y4

Telephone: (514) 634-8091

Fax: (514) 634-3817

E-Mail: unavailable

Web Site: <http://www.makivik.org/>

**Kativik Regional Government**

P.O. Box 9

Kuujuaq, Quebec J0M 1C0

Telephone: (819) 964-2961

Fax: (819) 964-2956

E-Mail: unavailable

Web Site: KRG does not have a web site.

**Kativik School Board**

2055 Oxford Street

Notre Dame de Grace, Quebec H4A 2X6

Telephone: (514) 482-8220

Fax: (514) 482-8278

E-Mail: unavailable

Web Site: <http://www.tvnc.ca/Members/ksb.html> (for KSB Educational Television)

**Nunavik Regional Board of Health and Social Services**

P.O. Box 900

Kuujuaq, Quebec J0M 1C0

Telephone: (819) 964-2222

Fax: (819) 964-2888

E-Mail: unavailable

Web Site: The Board does not have a web site.

**Kativik Regional Development Council**

P.O. Box 239  
Kuujjuaq, Quebec J0M 1C0  
Telephone: (819) 964-2035  
Fax: (819) 964-2611  
E-Mail: [Admin.KativikRegional.DC@resonet.com](mailto:Admin.KativikRegional.DC@resonet.com)  
Web Site: KRDC does not have a web site.

**Nunavik Investment Corporation/CFDC**

P.O. Box 239  
Kuujjuaq, Quebec J0M 1C0  
Telephone: (819) 964-2035  
Fax: (819) 964-2611  
E-Mail: unavailable  
Web Site: The Nunavik Investment Corporation/CFDC does not have a web site.

**Taqramiut Nipingat Incorporated**

Suite 501  
185 Dorval Avenue  
Dorval, Quebec H9S 5J9  
Telephone: (514) 631-1394  
Fax: (514) 631-6258  
E-Mail: unavailable  
Web Site: <http://www.tvnc.ca/Members/tni.html>

**Avataq Cultural Institute**

Room 304  
650 – 32nd Avenue  
Lachine, Quebec H8T 3K5  
Telephone: (514) 637-9883  
Fax: (514) 637-9707  
E-Mail: unavailable  
Web Site: Avataq does not have its own web site.

**Qikiqtani Inuit Organizations:****Qikiqtani Inuit Association**

P.O. Box 219  
Iqaluit, NT X0A 0H0  
Telephone: (867) 979-5391  
Fax: (867) 979-3238  
E-Mail: [lands@nunanet.com](mailto:lands@nunanet.com)  
Web Site: <http://www.nunanet.com/~lands/>

**Qikiqtaaluk Corporation**

P.O. Box 1228  
Iqaluit, NT X0A 0H0  
Telephone: (867) 979-4047  
Fax: (867) 979-3238  
E-Mail: unavailable  
Web Site: See Qikiqtani Inuit Association web site.

**Kakivak Association**

P.O. Box 1419  
Iqaluit, NT X0A 0H0  
Telephone: (867) 979-0911  
Fax: (867) 979-3707  
E-Mail: unavailable  
Web Site: See Qikiqtani Inuit Association web site.

**Qikiqtaaluk Wildlife Board**

P.O. Box 478  
Iqaluit, NT X0A 0H0  
Telephone: (867) 979-1560  
Fax: (867) 979-1491  
E-Mail: unavailable  
Web Site: See Qikiqtani Inuit Association web site.

**Kivalliq Inuit Organizations:****Kivalliq Inuit Association**

P.O. Box 340  
Rankin Inlet, NT X0C 0G0  
Telephone: (867) 645-2800  
Fax: (867) 645-2348  
E-Mail: unavailable  
Web Site: The Kivalliq Inuit Association does not have its own web site but information on the organization is available under the "Kivalliq Youth Leaders" portion of the arctic.ca site at <http://www.arctic.ca/~jonalik/orgs.html>

**Sakku Investments Corporation**

P.O. Box 188  
Rankin Inlet, NT X0C 0G0  
Telephone: (867) 645-2805  
Fax: (867) 645-2063  
E-Mail: [rdewar@arctic.ca](mailto:rdewar@arctic.ca)  
Web Site: Sakku does not have its own web site but information on the company is available under the "Kivalliq Youth Leaders" portion of the arctic.ca site at <http://www.arctic.ca/~jonalik/sakku.html>

**Kivalliq Partners In Development**

P.O. Box 709  
Rankin Inlet, NT X0C 0G0  
Telephone: (867) 645-2124  
Fax: (867) 645-2170  
E-Mail: [richc@arctic.ca](mailto:richc@arctic.ca)  
Web Site: <http://www.arctic.ca/kpd/>

**Kitikmeot Inuit Organizations:****Kitikmeot Inuit Association**

P.O. Box 18  
Cambridge Bay, NT X0E 0H0  
Telephone: (867) 983-2458  
Fax: (867) 983-2701  
E-Mail: unavailable  
Web Site: <http://www.polarnet.ca/polarnet/kia.htm>

**Kitikmeot Corporation**

P.O. Box 18  
Cambridge Bay, NT X0E 0C0  
Telephone: (867) 983-2095  
Fax: (867) 983-2075  
E-Mail: [kpeter@polarnet.ca](mailto:kpeter@polarnet.ca)  
Web Site: <http://www.polarnet.ca/polarnet/kitcorp.htm>

**Kitikmeot Economic Development Commission**

P.O. Box 18  
Cambridge Bay, NT X0E 0C0  
Telephone: (867) 983-2095  
Fax: (867) 983-2075  
E-Mail: [kpeter@polarnet.ca](mailto:kpeter@polarnet.ca)  
Web Site: <http://www.polarnet.ca/polarnet/kedc.htm>

**Nunavut Inuit Organizations:****Nunavut Tunngavik Incorporated**

P.O. Box 638  
Iqaluit, NT X0A 0H0  
Telephone: (867) 979-3232  
Fax: (867) 979-0218  
E-Mail: unavailable  
Web Site: NTI does not have its own web site but information on the company is available under the "Kivalliq Youth Leaders" portion of the arctic.ca site at <http://www.arctic.ca/~jonalik/orgs.html>

**Nunasi Corporation**

#260 – 5022 – 49th Street  
Yellowknife, NT X1A 3R7  
Telephone: (867) 920-4587  
Fax: (867) 920-4592  
E-Mail: [nunasi@internorth.com](mailto:nunasi@internorth.com)

Web Site: Nunasi does not have its own web site but information on the company is available under the "Kivalliq Youth Leaders" portion of the arctic.ca site at <http://www.arctic.ca/~jonalik/orgs.html>

**Nunavut Implementation Commission**

P.O. Box 1109  
Iqaluit, NT X0A 0H0  
Telephone: (867) 979-4199  
Fax: (867) 979-6862  
E-Mail: unavailable  
Web Site: <http://natsiq.nunanet.com/~nic/>

**Nunavut CEDO**

P.O. Box 18  
Cambridge Bay, NT X0E 0C0  
Telephone: (867) 983-2095  
Fax: (867) 983-2075  
E-Mail: [kpeterston@polarnet.ca](mailto:kpeterston@polarnet.ca)  
Web Site: The Nunavut CEDO does not have its own web site.

**Inuvialuit Organizations:****Inuvialuit Regional Corporation**

P.O. Box 2120  
Inuvik, NT X0E 0T0  
Telephone: (867) 777-2737  
Fax: (867) 777-2135  
E-Mail: [dbethune@idc.inuvialuit.com](mailto:dbethune@idc.inuvialuit.com)  
Web Site: <http://www.irc.inuvialuit.com>

**Inuvialuit Development Corporation**

Bag Service # 7  
(or 107 Mackenzie Road for courier)  
Inuvik, NT X0E 0T0  
Telephone: (867) 777-2419  
Fax: (867) 777-3256  
E-Mail: [dbethune@idc.inuvialuit.com](mailto:dbethune@idc.inuvialuit.com)  
Web Site: Information on all of the Inuvialuit Regional Corporation's affiliated social and commercial enterprises is available on the IRC web site.

**Inuvialuit Energy Corporation**

1100 – 300 – 5th Avenue S.W.

Calgary, Alberta T2P 3C4

Telephone: (403) 262-6955

Fax: (403) 266-4833

E-Mail: [dlittle@discoveryplace.com](mailto:dlittle@discoveryplace.com)

Web Site: Information on all of the Inuvialuit Regional Corporation's affiliated social and commercial enterprises is available on the IRC web site.

**Inuvialuit Communications Society**

P.O. Box 1704

Inuvik, NT X0E 0T0

Telephone: (867) 777-2320

Fax: (867) 777-2744

E-Mail: unavailable

Web Site: <http://www.tvnc.ca/Members/ics.html>.

## **8.2 Research Guidelines for the Labrador Inuit Settlement Area<sup>8</sup>**

Ethical guidelines for research in Aboriginal communities has been a topic of debate for a number of years, with no one definitive standard agreed upon. Many argue that there can be no one overseeing standard due to the myriad issues before both scientist and community.

The opinions of both scientific and Aboriginal communities often differ in methodology and application of such guidelines, but all agree there must be a safeguard in place to protect each party involved in the research process.

This set of guidelines builds on the present assortment of publications available throughout Canada on the issue of research in Aboriginal communities, with a focus toward the aims of the Labrador Inuit.

The following ethics have been approved by the Board of Directors of the Labrador Inuit Association to be the conditions required for conducting research within the Labrador Inuit Homeland. These conditions outline the responsibilities of the researcher and community or accountable Labrador Inuit agency alike, and are expected to be adhered to by all parties.

Upon agreement of the following conditions, contracts are available from the Head Office in Nain.

### **8.2.1 Obtaining ethical approval**

Appropriate consultation/negotiation with Aboriginal communities is an essential pre-requisite to ethical research practice. Researchers should, at the earliest opportunity in the development of the research proposals seek the ethical approval of participating communities and the Labrador Inuit Association (LIA), as the political body representing this select clientele.

Ethical approval shall be obtained in the following manner:

1. The primary point of contact shall be the Labrador Inuit Association (LIA). It will be assumed that the subject matter has not received ethical approval from the community/communities proposed to be studied, and the matter shall as a first step be the subject of a meeting of the Board of Directors of the Labrador Inuit Association, through an appropriately designated sub-committee.
2. The Board of Directors will review the researchers initial proposal and will then set out steps of the process for consideration of the research project. These steps will involve:
  - presentation of initial proposal to the Board,
  - consultation with concerned Labrador Inuit communities and or individuals,
  - revised proposal development to reflect community/ individuals input,
  - second review of the proposal by the Board of Directors, and

---

<sup>8</sup> These guidelines were sourced from the Labrador Inuit Association's website.

- if acceptance of the proposal is desired by concerned Labrador Inuit, the Board of Directors will have the communities and primary researchers jointly submit a Research Agreement Contract, and
- should the communities or individuals not wish to participate in the project, a complete withdrawal of the proposal will be required of the researcher by the Board of Directors.

### 8.2.2 The consultation process

Researchers are required to demonstrate to the Board of Directors that proper consultation with concerned Labrador Inuit communities has occurred.

Compliance with the following requirements shall demonstrate an acceptable level of consultation:

- provision of evidence that consultation was conducted according to the level of comprehension of the community,
- provision of evidence of meetings with the concerned Labrador Inuit community, including what specific efforts have been undertaken to inform the community i.e. translation of materials detailing the intent and methodology of the proposed project,
- provision of materials that demonstrates the researchers have considered the benefit to the community, including efforts to promote sharing of research skills and skill development,
- provision of materials that demonstrates that researchers have addressed the question of ownership of materials, and provision of material that demonstrates the degree to which the researcher has addressed social and cultural imperatives within the community.

It is a well-recognized position of the Labrador Inuit Association (LIA) that all documents for use by its membership must be translated into both Inuktitut and English. As well, at any public meetings or gatherings of Labrador Inuit, for the purpose of information sharing and understanding, there must be a qualified interpreter translator present.

### 8.2.3 Ongoing review of ethical standards

The Board of Directors have an ongoing responsibility to ensure compliance with appropriate ethical standards. Such a responsibility shall be exercised through the management of research project funding. The following provisions shall exist:

- that where the research involves health related issues, the Labrador Inuit Health Commission (LIHC), the health care affiliate of the Labrador Inuit Association (LIA), will be responsible for the administration of funds for research initiatives;
- that where the research involves other issues directed toward another department of LIA; LIA will determine which department shall administer funds for particular research initiatives.

#### 8.2.4 Social, gender and cultural issues

The process of research in Aboriginal communities presents potential areas of social and cultural conflict. Researchers must address this potential for conflict. The use, by researchers of assumptions of moral, social or cultural correctness or appropriateness could interfere with community life and denigrate research. In the development, implementation and evaluation of research proposals, researchers must seek the active participation and endorsement of communities at each stage of the process. If this process results in revision to any stage of the research process the community should, once revisions have been incorporated, consider its consent of the revised proposal to ensure protection of community lifeways.

Researchers should take great care in areas of research that deal with:

- gender,
- parenting, family and community structures and responsibilities,
- personal and collective relationships,
- invasions of the body,
- handling of human specimens and products.

The responsibility of researchers to guard against violation of cultural and social imperatives beyond the primary contact with the community must also be addressed. The researcher must obtain the approval of the community to any proposed use or publication of material or information collected during the research process.

Researchers must provide the community with an understanding of the process and intent of research. This would include an understanding of matters relating to the collection and analysis of data, the drafting and publication of reports and future use of research materials.

#### 8.2.5 Communication and consent

Communities must be provided with all the relevant information and researchers should utilize appropriate Aboriginal educational processes and tools.

Researchers must comply with any request for further information from any affiliate of the Labrador Inuit Association (LIA) designated to be in control of a specific research project.

The obligation of researchers to comply with this requirement shall remain in force for the duration of the research project.

Community process of decision making will reflect varying social and cultural values. In obtaining the consent of communities to research, the researchers must respect the Aboriginal approach to decision making.

Researchers must address this need, ensuring that they do not act in a pre-emptive or impulsive manner. For example, researchers must allow sufficient lead time for the

community to consider any proposals. Similarly, they should not seek to access cultural or community sub-groups or individuals without permission.

Having addressed this point however, researchers must be aware of the continuing need to obtain the consent of individual Labrador Inuit that may either participate in or contribute to the execution of any research project.

#### 8.2.6 Community benefit or employment of local people

Researchers working in Labrador Inuit communities may confront a variety of unfamiliar environments and circumstances. In many circumstances the employment of community members will aid the researcher and improve the quality of communication and ultimately strengthen the initiative.

Researchers, where the Labrador Inuit Association (LIA) sees it necessary, must provide for the employment of Labrador Inuit investigators. This employment opportunity should be conducted in a manner that allows for skill development and skill transfer to Labrador Inuit where possible.

Research should focus on, and provide knowledge about, activities and issues that will contribute to an improvement in Labrador Inuit health and community development.

Researchers must identify the areas and nature of potential benefit and impact of research and obtain the concurrence of the local community and the Labrador Inuit Association, that such outcomes are of value to the community at large.

#### 8.2.7 Ownership and publication of materials

Research material and data shall remain the property of the Labrador Inuit Association and the involved community. The LIA and the community retain the right to censor materials of a sensitive nature. Prior to publication or other use of research materials or reports, the approval of the relevant aforementioned group is required. All documents, reports, informational and audio visual materials must be translated into Inuktitut and English.

In preparing acknowledgements of research, the proper accreditation of participation and assistance of Labrador Inuit, communities and other agencies should be noted.

Results of research must not be published in a form that permits identification of individual subjects and/or objects of a sensitive nature. Pictorial material should only be made with the consent of the community and should be handled according to their wishes.

#### 8.2.8 Exploitation of community resources

In seeking the co-operation of Labrador Inuit and local communities, researchers must provide reimbursement of any cost incurred which relates, directly or indirectly to

programs of research. Such costs could include (but are not limited to) telephones, transport, freight, accommodation, supervision costs and wages of assistants and interpreters.

### 8.2.9 Enforcement

Should researchers not fulfil the obligations of the research agreement (as outlined in the research contract), the Labrador Inuit Association (LIA) and its Board of Directors will take appropriate action as required. This action will involve reports of the unethical research practices to the funding agency, publication agency, the involved university, researcher peer group, other Aboriginal agencies, etc.

But, it is expected that all individuals and agencies conducting research in the Labrador Inuit region will be aware of the research policy of LIA and will have agreed to the terms and conditions in advance. This awareness, coupled with consultation and a mutually satisfying research contract, should protect the rights and interests of all parties.



## 9.0 Bibliography

Usher, P.J. 1992. Modeling Subsistence Systems for Social Impact Assessment. Ottawa: A Report Prepared for the Grand Council of the Crees of Quebec.

Usher, P. J. and Weinstein, M. S. 1991. Towards Assessing the Effects of Lake Winnipeg Regulation and Churchill Regulation and Churchill River Diversion on Resource Harvesting in Native Communities in Northern Manitoba. Winnipeg: Canadian Technical Report of Fisheries and Aquatic Sciences, Report 1794.

Berkes, F., George, P. J., Preston, R. J., Hughes, A. and Turner, J. 1994. Wildlife, Harvesting and Sustainable Economy in the Mushkegowuk Region of the Hudson/James Bay Lowlands. Hamilton: QSEP Research Report No. 306. McMaster University, Hamilton, Ontario

George, P., Berkes, F., and Preston, R. J. 1993. Aboriginal Land Use and Harvesting in the Moose River Basin: A Historical and Contemporary Analysis. Hamilton: QSEP Research Report No. 298. McMaster University, Hamilton, Ontario

Beanlands, G. E. and Duinder, P. N. 1983. An Ecological Framework For Environmental Impact Assessment in Canada. Halifax: Institute for Resource and Environmental Studies, Dalhousie University

McCann, L. and Gunn, A.(editors), XXXX. "The North: One Land, Two Ways of Life" in Heartland and Hinterland: A Regional Geography of Canada, Chapter 10. Prentice Hall, Canada

Proceedings from the Workshop on the Proposed Survey of Living Conditions in the Arctic, (in preparation), 1998. Slagelse, Denmark

Statistics Canada, 1996 Census of Canada, Area Profiles

Statistics Canada, 1996 Census of Canada, special tabulations