INUIT STATISTICS IN CANADA:

AN ANALYSIS OF CONCEPTS AND CATEGORIES USED BY GOVERNMENT AGENCIES AT FEDERAL, PROVINCIAL AND TERRITORIAL LEVELS

by

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EXECUTIVE SUMMARY

The body of government statistics on Inuit people in Canada has grown exponentially over the past two decades. Early studies based on government statistics, such as Robinson (1944) and Findlay (1955) were basically limited to population size data that was collected by RCMP officers travelling by dog team to Inuit camps. The first Census to systematically record data specific to Inuit was implemented in 1971. Ten years later, Census concepts on language and ethnic origin were improved to record more detailed and precise information. Since the late 1980s and early 1990s, increasingly elaborate government surveys at Federal and Territorial levels measure a growing range of social and economic characteristics. These include productive activities, such as levels of participation in hunting and fishing, to detailed consumption patterns, such as the frequency of take-out foods that are ordered in Inuit communities.

In many respects, Inuit differ very significantly from other groups in Canada. The majority of Inuit moved into permanent, centralized communities about 30 years ago. With respect to social and demographic characteristics, the population is very young, and growing very rapidly. Most Inuit live in communities that are geographically isolated and very small by southern Canadian standards. Everyday life in these communities is marked by distinctive cultural practices and beliefs. While levels of formal education are increasing gradually, the overall level of formal education for Inuit is well below the Canadian average. With respect to economic characteristics, Inuit are under-represented in wage employment, and a large proportion continues to practise subsistence hunting and fishing.

This report assesses the validity of several basic statistical concepts used by government agencies to: (1) record social and economic data on Inuit, and; (2) inform social and economic policy development in Inuit communities. The analysis includes concepts developed and used at Federal, Provincial and Territorial levels. The analysis focuses on statistical concepts that measure: (a) family and household characteristics; (b) forms of employment and productive economic activity; (c) consumption, and; (d) redistribution of wealth. Due to limitations of time and space, the assessment of government documents is limited to the most recent statistical publications, i.e., those from the late 1980s and early 1990s.

The statistical concepts are assessed by comparing the degree of fit between their definitions and the relevant ethnographic data on social and economic conditions in contemporary Inuit communities. A basic finding of this study is that there is a very significant discrepancy in the quantity and quality of social and economic statistics between the major regions in which Inuit live. There is comparatively less documentation on Inuit in Quebec, and particularly in Labrador, than there is on Inuit in the Northwest Territories.

PART 1: OBJECTIVES AND SCOPE OF THE REPORT

The basic objectives of this research report are twofold. The first is to evaluate the validity of statistical **concepts** and **categories** currently used by government agencies and departments to gather social and economic data on the Inuit people throughout Canada. The second is to provide an assessment of the degree to which these statistical concepts and categories are useful for social and economic policy development in Inuit communities. This study provides a framework to analyze whether statistical concepts are able to describe the full range of social and economic realities in Inuit communities.

1.1 Regional Focus

The majority of Inuit people in Canada inhabit arctic regions stretching from the Mackenzie Delta in the NWT to the Labrador coast.[i] While statistical data are gathered about Inuit who live in the Yukon Territory and in southern Provinces, their population is dispersed and too small to provide meaningful analyses except by agglomeration (Robitaille and Choinière 1985: 1-3). Therefore, the study is limited to statistics gathered in the areas in which Inuit constitute a majority, or at least a significant proportion of the total community population. This includes every region in the NWT, as well as the Nunavik region of northern Quebec, and 5 communities in Labrador.[ii]

The communities in which Inuit live are linked to administrative structures and socio-economic programs that are regulated by different levels of government jurisdiction. Therefore, the study examines statistical classifications used by government departments at Federal, Provincial and Territorial levels.

1.2 Topical Focus

As requested by the Royal Commission on Aboriginal Peoples, this study focuses on concepts developed to analyze: (1) the family and the household; (2) various forms of employment, work and productive activity; (3) consumption, and; (4) redistribution of wealth. These constitute the 4 major analytical domains of this report.

It is beyond the scope of this report to analyze the full body of government statistics on Inuit. Such an undertaking would require a review of: (a) Census publications from 1971 to 1991; (b) northern administration and RCMP files at the National Archives (RG-85 and RG-18 series) that contain various socio-economic statistics collected since the 1920s; (c) detailed analyses of demographic data (including variables such as fertility, mortality, mobility, age structures, etc)[iii] ; and (d) renewable resource harvesting statistics collected since the 1970s.[iv] The time constraints and

limited resources for this project restrict its analysis to the most recent social and economic statistical publications.

The evaluation of the validity of statistical concepts is centred on their **external validity**; meaning, the degree to which the concepts actually represent what they purport to represent (Suchman 1979: 125).[v] This report does not attempt to prove (or disprove) the validity of statistical **measures** pertaining to Inuit communities. In other words, this study does not examine the accuracy of data through statistical tests. Rather, it evaluates the extent to which the definitions of statistical concepts reflect the nature of Inuit social and economic institutions and practices.

In this report, a **statistical concept** refers to the definition given to a term used to measure a particular variable. A **statistical category** refers to a breakdown of a concept, based on a specific criterion. For example, the term 'employed' as defined by Statistics Canada represents a statistical concept. Should employment data be broken by gender and age group in a table, then each gender and age 'slot' would represent a category of the employment concept.

Testing for external validity requires an evaluation of the degree of fit between the concepts and some "objective or factual criterion" (Suchman 1979: 125). Since statistical concepts and categories are, in themselves, **qualitative**, it is necessary to evaluate their validity by reference to similar, i.e., qualitative criteria. For the purposes of this study, statistical concepts are evaluated according to criteria drawn from the recent body of ethnographic literature pertaining to socio-economic conditions in contemporary Inuit communities.

The second major objective of the report is to provide an assessment of the **usefulness** of government statistical concepts for social and economic policy development in Inuit communities. This evaluation is related to the issue validity. Invalid concepts or categories will classify data that do not reflect social or economic realities in Inuit communities. This, in turn, will misinform policy makers, advocates and administrators.

1.3 Report Outline

This study draws on two distinct methods to achieve this assessment. The first involves a literature review that defines the major current social and economic policy issues in Inuit communities. The second involves an analysis of interview data collected from representatives of three major Inuit organizations: Inuit Tapirisat of Canada (ITC), Nunavut Tunngavik (formerly Tungavik Federation of Nunavut) and Pauktuutit (Inuit Women's Association). Both ITC and Pauktuutit represent Inuit at a national level, while Nunavut Tunngavik represents the Inuit beneficiaries of the Nunavut comprehensive claim that live in the 3 eastern NWT regions (Baffin, Keewatin and Kitikmeot). A more detailed discussion of the research methods used in this study is presented in the Appendix.

The major body of analysis in this report is contained in Parts 2, 3, and 4. Part 2 consists of an analysis of

government statistical documents with a focus on the structure and definitions of their major concepts. Particular attention is given to issues of inclusion and exclusion of socio-economic data. The goal is to classify and rank government statistical concepts and data collection methods by their relative degree of validity.

Part 3 consists of the detailed assessment of the validity of these concepts and includes two major sections. First is a review of recent ethnographic data pertaining to features of contemporary Inuit social and economic institutions that are either: (1) at least partly analyzed by government statistical concepts, or; (2) excluded from government studies, but relevant for policy development issues. The second section of Part 3 follows from the classification of statistical concepts produced in Part 2. This analysis directly compares government concepts with ethnographic data and evaluates their respective degrees of external validity.

Part 4 analyzes data collected from interviews with representatives of Inuit organizations. This is supplemented by a review of recent publications that focus on socio-economic policy development and change in Inuit communities. The major findings and recommendations of the report are highlighted in Part 5.

PART 2: DESCRIPTIVE ANALYSIS OF GOVERNMENT STATISTICAL CONCEPTS

2.1 GOVERNMENT OF NEWFOUNDLAND

The government of Newfoundland does not publish statistics pertaining to the Inuit of Labrador on a regular or systematic basis. The essential rationale for this decision is that the Labrador Inuit population, at about 4,000 persons, is simply too small to justify the expense of tabulating, collating and publishing time-series statistics (ITC 1992: 8).

Several departments (including Health, Education, and Social Services) collect data on predominantly Inuit communities. For example, various social and economic statistics on Inuit are tabulated in the **Annual Reports of the Division of Northern Labrador Affairs** (Government of Newfoundland 1952-67), and the **Annual Reports of the Northern Labrador Services Division** (Government of Newfoundland 1968-74).

However, these data are not systematically classified by ethnic origin, meaning that the statistics incorporate Inuit, other Native populations, as well as non-Natives (ITC 1992: 8). Such statistics are intended primarily for internal departmental use and are usually unavailable to the general public, except through the Access to Information Act (p.c. Andrews 1993; Perney 1993). Organizations needing published statistical data specific to Labrador Inuit must rely on three major sources: (1) Statistics Canada (the census of Canada and the 1991 Aboriginal Peoples' Survey); (2) documents from the Labrador Inuit Association (e.g., Brice-Bennett 1978); and (3) the recently published compendium **Historical Statistics of Newfoundland and Labrador** (1990) [hereafter **HSNL**].

The majority of statistics - and thus of statistical concepts - in **HSNL** were tabulated from Census data beginning in 1951. The principal figures collected by the Newfoundland government refer to basic population and residence data. The latter are considered more accurate than the Census data since they allow respondents in southern Labrador regions to identify their residence on a seasonal basis (Brice-Bennett 1986: 1111-1112).

This is an important criterion since many Innu and Settler families have, historically, at least two residential locations (Black 1957). The Innu and Settler constitute the other two major Native populations in Labrador. However, the majority of Inuit live permanently in northern Labrador communities, and the single residence definition provided by the Census is adequate.

A fundamental limitation to the population concept in the **HSNL** document is that it does not distinguish between single and multiple ethnic origin status. Therefore, this report **assumes** that a single-origin definition was used,

as was the case with the Census until 1981 (see below). Since the "Settler" population is of mixed (Inuit and Euro-Canadian) ancestry[vi], the Inuit population numbers may be under-counted.[vii]

With respect to economic data, both the **HSNL** (1990) and the **Renewable Resource Use and Wage Employment in the Economy of Northern Labrador** (Brice-Bennett 1986) draw their statistical concepts for Labor Force data from the Census. Thus, productive but subsistence-oriented activities are excluded from Labor Force categories (see below). Data concerning renewable resource harvesting in Inuit communities were originally collected by non-governmental agencies such as the Labrador Inuit Association.

The only government agency that systematically collects and publishes statistics on Labrador Inuit is Statistics Canada. Compared with northern Quebec and the NWT, Labrador is the northern region which is most lacking in government (or any other source of) statistical data for Inuit (ITC 1992: 8-9).

2.2 GOVERNMENT OF QUEBEC

The government of Quebec has stopped collecting population statistics based on ethnic origin since 1975 (Robitaille and Choinière 1985: 2). Therefore, Provincial statistics pertaining to Quebec Inuit involve essentially the same problem of extrapolation as those from the Newfoundland government.

The majority of Inuit live in the Nunavik area under the jurisdiction of the Kativik Regional Government, created since the ratification of the James Bay and Northern Quebec Agreement (JBNQA) in 1975. The JBNQA allowed for the creation of an umbrella organization, Makivik Corporation, responsible for economic development in the land-claim settlement areas. The research branch of Makivik Corporation has carried out several statistical surveys focused on harvesting and land use throughout the late 1970's and 1980's (ITC 1992: 9). Including the census and the 1991 Aboriginal Peoples Survey (hereafter APS), the Makivik studies form the major source of social and economic statistics specific to Inuit communities in the Nunavik area.

As in the case with Inuit in Labrador, there are several statistical databases on Inuit in Quebec that have been compiled by non-governmental agencies. For example, The Département de Démographie, Université de Montreal, has tabulated revised demographic data in its **Registre de la Population des Inuit du Nouveau-Québec** (Choinière and Robitaille 1983: 126). In addition, several studies have drawn on Provincial government statistics. These include, for example, Boily (1965), Légaré (1971) and Dorais (1973).

Prior to 1975, the government of Quebec recorded general Inuit population figures in the **Annuaire du Québec** (Bureau de la Statistique 1965-75). The most recent publication available from this agency is the **Région Administrative du Nouveau-Québec** (1990), which records basic demographic data: population growth, age-structure, fertility, mortality, education, etc. However, since the data are not classified by ethnic origin, they cannot be used to obtain specific information about Inuit.

Therefore, as in the case of Labrador, the only current government agency collecting Inuit-specific social and economic statistics for the Nunavik area is Statistics Canada, through the Census and the APS.

2.3 GOVERNMENT OF THE NORTHWEST TERRITORIES

The GNWT Bureau of Statistics is the second major government agency, after Statistics Canada, that currently collects and publishes systematic data specific to Inuit (Robitaille and Choinière 1985: 2). In addition, the GNWT Department of Culture and Communications publishes general Inuit population and school enrolment figures in yearly documents such as the **NWT Data Book** and the **Northwest Territories Annual Reports**. The 3 major current documents compiled by the Bureau of Statistics are: **Statistics Quarterly** (1979-present), the **NWT Labor Force Survey** (1984, 1990a-c), and the **Northwest Territories Renewable Resource Harvester Survey** (1991). These are described separately below.

(a) Statistics Quarterly

Statistics Quarterly, published since 1979, provides very limited types of data on Inuit, and on an inconsistent basis. For example, issues from 1979 (Vol.1) to 1986 (Vol.8) provide only a breakdown - by number and percentage - of the total NWT population, by major ethnic groups. The classification scheme is as follows:

All Groups
- { Native
- { Dene/Metis
  - { Inuit
- { non-Native

The four issues for 1988 (Vol.10) contain no data by ethnic groups. The 1989 issues return to the format used until 1986, and also contain admission figures to NWT correctional centres. The most recent issues for 1992 (Vol.14), break down

the total NWT population by major ethnic groups, to the community level.

However, **Statistics Quarterly** does not include a definition of the "ethnic group" concept. The publication essentially uses this concept to highlight distinctions between the aboriginal and non-Native populations of the NWT, rather than to analyze detailed demographic data. (The categories "Native" and non-Native" **do not**, in a strict sense, constitute "ethnic groups"). The other statistics that refer to social and economic conditions in the NWT are not classified by ethnic origin.

(b) NWT Labor Force Survey (LFS)

The Bureau of Statistics conducted extensive surveys of the NWT Labor Force in 1984 and 1989. In terms of breadth as well as detail, the classifications of the statistical data in these documents, particularly the 1989 survey, are comparable to those produced by Statistics Canada.

The 1989 LFS consists of 3 major reports. The labor force concepts in the LFS are identical to those used by Statistics Canada (1992b). The labor force is defined as the proportion of the population aged 15 years and over that "was employed or unemployed during the week prior to the survey" (GNWT 1990b: 3). The concept of "employment" refers to:

> people who during the week prior to the survey: (i) did any work at all excluding housework or other maintenance around the home and volunteer work; or (ii) were absent from their job or business because of vacation, illness, on strike or locked out, or were absent for other reasons (GNWT 1990b: 3).

For its part, "unemployed" is conceptually defined as:

> persons who during the week prior to the survey: (i) were without work, had actively looked for work in the previous four weeks and were available for work; or (ii) had been on lay-off and expected to return to their job; or (iii) had definite arrangements to start a new job within four weeks or less (GNWT 1990b: 3).

The LSF also includes 2 other major classifications of the working-age population (15 years and over). The first defines the proportion of the adult population that is "not working" (persons who were not employed at a job or business during the week prior to the survey - GNWT 1990b: 3). The second defines the proportion of the adult population that "wants a job" (persons who were not currently employed, or persons on temporary lay-off who wanted a different job - GNWT 1990b: 3).

Conceptually, the category "not working" is more inclusive than the "unemployed" concept, since it intersects

the "in the labor force" and the "not in the labor force" categories. For its part, the category "wants a job" represents a sub-category of the "not working" concept, since it does not assume that individuals who desire employment are necessarily actively looking for work.

The first LFS document, **Report No.1**, summarizes the labor force activity of the NWT population, by: (1) regions; (2) ethnic group and sex; (3) by region and community; and (4) by Native and non-Native categories by regions.

The regional classification is also identical to that used by Statistics Canada (1992b) for the NWT. Total population numbers are broken down for 5 major administrative areas: Baffin, Keewatin, Kitikmeot, Inuvik, and Fort Smith (GNWT 1990a: 12). The regional classifications of labor force data provide numbers only for Native and non-Native groups, i.e., they do not provide Inuit -specific data.

This classification structure is modelled on the Native composition of the Inuvik and Fort Smith regions, which include significant numbers of Inuit **and** Indian and Metis peoples.
In all other regions of the NWT, Inuit form the only statistically significant "Native" population.[viii] Thus, while the category "Native" is **in principle** more inclusive than the "Inuit" category, **the two are statistically interchangeable** in the Baffin, Keewatin and Kitikmeot regions.

Report No.2 tabulates NWT labor force activity by three variables: education levels, age and language. The "age" variable is broken into 4 categories: 15-24 yrs, 25-44 yrs, 45-64 yrs, and 65 yrs and over. Data are provided at Territorial and regional levels, using the same overall classification system as **Report No.1**.

Report No.3 presents statistical data on Inuit that are unavailable from any other governmental agency in Canada.[ix] The data in this document focus on the subsistence economy of Native groups in the NWT, and on the interrelationship between subsistence activities and wage-labor. As in **Report No.2**, data are provided at Territorial and regional levels, and are classified according to the same concepts used in the other LFS reports.

Although traditional Native subsistence practices are productive economic activities, hunting, fishing and trapping are technically not classified as "labor force" activities. Consequently, they have been downplayed or ignored in most governmental statistical surveys and analyses.

In **Report No.3**, levels of participation in traditional economic practices are tabulated according to three types of classifications: (1) total participation during the year; (2) participation by number of weeks; and (3) participation by

months of engagement in the activities. This classification is used for each type of traditional activity (hunting and fishing, trapping, and craft production). The final section of **Report No.3** cross-references the levels of participation in wage-labor with the levels of participation in traditional economic activities, according to variables of age and sex. The document uses the same breakdown of the age variable as that used in **Report No.2**.

(c) NWT Renewable Resource Harvester Survey (RRHS)

The RRHS (GNWT 1991) represents a second comprehensive statistical study of traditional Native economic activity in the NWT. As opposed to the **LFS Report No.3**, data are tabulated by Native households rather than by number of individuals. The RRHS defines "Native households" as:

households with at least one native person resident at the time of the survey (GNWT 1991: 3).

This concept is subdivided into the more specific category of "harvesting households", which refers to:

native households having at least one member involved in trapping, hunting or fishing during 1989 (GNWT 1991: 3).

The regional classification system used to tabulate data in the RRHS also differs from that in the LFS documents. Whereas the LFS broke down NWT data to 5 major administrative areas, the RRHS Territorial statistics are broken down only to 3 (more inclusive) regions: The TFN Claim Area, the Inuvialuit Settlement Area, and the Dene-Metis Claim area (GNWT 1991: 3). Since the RRHS uses different concepts and categories to classify its data, its statistics **cannot** be compared analytically with those in the LFS, nor with those in Statistics Canada documents.[x]

A final difference between the RRHS and the other GNWT documents is that each of the 25 tables in the RRHS involves unique variables. In other words the RRHS does not provide break-downs of total tabulations by related variables in subsequent tables. The first 4 tables present demographic data on Native households. Variables include number of persons (categories 1 - 10), number of adults, and number of children (categories 1 - 7+).
Tables 5 to 14 record the number of households by the level of individuals involved in hunting and fishing, trapping, and craft production. Tables 15 to 17 provide Native Household income data by source. Tables 18 and 19 classify the proportion of meat and fish obtained by hunting/fishing. The "proportion" variable is broken into increment of 25%. Tables 20 to 22 provide statistics on Native Household harvesting equipment, while tables 24 and 25 classify the type

and level of operating expenses of harvesting activities. In the latter, the concept of "operating expenses" includes two components: ammunition and gas.

2.4 FEDERAL GOVERNMENT

2.4.1 INDIAN AND NORTHERN AFFAIRS CANADA (INAC)

Over the last 20 years, INAC has produced numerous reports in the fields of education, health, and social services that include statistical studies of Inuit. These reports draw on a variety of information sources, including internal departmental data as well as data from the Government of the Northwest Territories and the Government of Quebec (e.g., INAC 1961-73a, 1961-73b).

One of the major recent studies, **Highlights of Aboriginal Conditions, 1981-2001** (Hagey, Larocque and Mc Bride 1989a-c), involves statistical extrapolations from 1981 and 1986 Census Data. The document is sub-divided into three parts: (1) Demographic Trends; (2) Social Conditions; and (3) Economic Conditions. The analysis of data about Inuit is presented only at the **national** level. Tables record and project trends concerning: population size, dependency ratios, infant mortality, suicide rates, infant deaths, average census family size, single parent families, education levels, labor force activity, full-time employment, occupational distribution, persons with income, major sources of income, averages for family and individual income, etc.

Canada's North: The Reference Manual is another major recent publication (INAC 1991). This document is revised periodically. Its most recent edition is updated to March 1990. The social and economic data are mainly tabulated from Statistics Canada - specifically the 1986 census. These data are presented for the NWT and the Yukon at Territorial levels. Population figures are reported also at community levels. However, the data are not broken down by ethnic origin: they are classified only by "Native" and "non-Native" categories. **Canada's North** contains general statistics on: Native and non-Native labor force participation; estimated overall values of Native subsistence hunting and fishing; and

food price indexes for several NWT communities. The document also contains (a limited range of) basic health data (INAC 1991:3.11, 3.12). It is important to note that northern Quebec and Labrador are **excluded** from the document.

The majority of INAC data pertaining to Inuit are obtained from other sources, primarily Statistics Canada. Consequently, the analysis of INAC data is subsumed under that of Statistics Canada (see below).

2.4.2 STATISTICS CANADA

(a) 1991 Aboriginal Peoples Survey (APS)

The Aboriginal Peoples' Survey is the first major statistical study specific to Aboriginal Peoples conducted by Statistics Canada (Statistics Canada 1993a).[xi] Technically, the APS is classified as one of the several post-Censal surveys that are conducted between Census-taking periods. The APS was implemented between the fall of 1991 and January 1992 (ITC 1992: 24). It differs fundamentally from the Census in its (original) intent to provide synchronic, as opposed to time-series, data on Aboriginal Peoples (ITC 1992: 39). In other words, at the time of writing, it is uncertain whether the APS will be repeated at some future date.

The statistical concepts in the APS cannot be analyzed fully in this report since several APS publications, including a document specific to Inuit, will not be released until late 1994 (Statistics Canada 1993a:7).[xii] Consequently, the review is limited to 2 statistical catalogues: **Schooling, Work and Related Activites, Income, Expenses and Mobility** (Statistics Canada 1993b), and **Language, Tradition, Health, Lifestyle and Social Issues** (Statistics Canada 1993c).

Design and Basic Classification of Data

The APS **sample** was selected from "respondents who had indicated at least one Aboriginal origin...on their Census questionnaire" (Statistics Canada 1993b:liii). However, the APS **population** consists of "those persons who further indicated, on their APS questionnaire, that they **identified** with at least one aboriginal group..." (Statistics Canada 1993b:liii).

As opposed to the Census, which allows ethnic identification to be self-reported on the basis of single or multiple origin, the APS allows individual Native identification as an **open** category: i.e., there are no pre-defined criteria that determine how an Aboriginal Person should report him/herself.

In both documents reviewed below, data on Inuit are tabulated at total Provincial, Territorial and National levels. Individual community profiles are also available, in separate documents. However, regional classifications (for the NWT) are unavailable, except by ordering "special runs" of APS data from Statistics Canada.

Economic Concepts

The catalogue titled **Schooling, Work and Related Activities, Income, Expenses and Mobility** contains seven tables that focus on socio-economic status.

Tables 1.7 and 2.7 present, respectively, the schooling characteristics of adults (15-64 years) and children (5-14 years). The tables feature several common characteristics. These include breakdowns of population by:

(a) number of elementary and secondary schools attended;
(b) living arrangements while attending elementary and secondary schools;
(c) number having Aboriginal teachers;
(d) language used in classrooms;
(e) teaching about Aboriginal people;
(f) degree of enjoyment of such teaching;

Table 1.7 features several questions exclusive to the adult population, that focus on training characteristics and adult education and upgrading courses. An interesting feature of Table 1.7 is its separation of the adult population into 2 major age-groups: those between 15-49 years, and those between 50-64 years. Both age groups are broken down by highest

level of schooling, and by number of training courses. The older group is asked a specific question on residential school attendance.

Tables 3.7, 4.7 and 5.7 focus on different aspects of the economic status of adult Inuit. Table 3.7 presents employment and business ownership characteristics. It includes a standard breakdown by labor force population, using Census concepts (reviewed below). However, the table contains several unique questions that indicate the number of persons:

(a) who worked for income by number of jobs held throughout 1990-91;
(b) who report problems in finding work, by **perceived cause of difficulty**;
(c) who were involved in activities to support themselves and their families since 1990 **for which they did not receive money**.

However, the latter question does not include a description of **types** of activities. Therefore, while it includes responses by hunters, its design makes it impossible to **isolate** hunting activities from other types of economic activities that do not generate cash.

Table 4.7 presents selected income characteristics. Total employment income is distinguished from total income. Both concepts are broken into 6 income ranges: none, <$2,000, $2,000-$9,999, $10,000-$19,999, $20,000-$39,000 and $40,000 or more. Table 5.7 lists selected household expenses, by frequency and location of purchase (i.e., within or outside the community). These include: food (restaurant and store-bought), gasoline, travel, clothing, entertainment, day care, supplies and services for home repairs, vehicle and boat repairs, and equipment for hunting, fishing and trapping. The characteristics listed in this table have a **very uneven** financial weight. For example, hunting, fishing and trapping equipment (a very comprehensive category) is **not** broken into more detailed items. On the other hand, the table lists specific categories for "hair cuts" and "VCR movie purchases or rentals". Also, the concepts in Table 5.7 strictly measure the relative frequency of expenses, as opposed to their cash **magnitude**.

Finally, Tables 6.7 and 7.7 present the mobility status of adults and children. They feature several standard concepts used in the Census, but include specific questions on time spent on the land (away from home). The range of time is broken into 4 categories: 1-2 weeks, 3-4 weeks, 5-20 weeks and 20 weeks or more. These tables also include measures of persons having homes in 2 different communities. Thus, this table addresses some of the particular features of Labrador native groups, as described in **section 2.1**.

Social and Cultural Concepts

The catalogue titled **Language, Tradition, Health, Lifestyle and Social Issues** contains the major APS concepts on Inuit social and cultural features.

Tables 2.7 and 3.7 contain selected characteristics of language and tradition of adults and children. The categories focus on detailed aspects of Aboriginal language fluency, teaching and use in different domains (speech, writing, the media, and social services). Several questions are designed to measure the degree and manner of Aboriginal language retention. However, **only one** very broadly phrased category measures participation in traditional activities, without providing a specific definition of the latter. This category includes a question measuring the number of persons that experience problems in participating, but again, the nature of the problems is **not** specified.

Tables 4.7 and 5.7 measure, respectively, selected health characteristics, lifestyle and social issues of adults, and selected health characteristics of children. Statistical concepts on health are tangentially relevant to this report. The tables contain questions on the health status of the respondents, ranked by ordinal scales, from "poor" to "excellent". They also measure the quality and frequency of contact with health care professionals. Finally, both tables contain measures of "safety", defined by the degree to which respondents use seat belts, helmets and life jackets when travelling.

Table 4.7, focusing on the adult population, contains several questions on lifestyle and social issues that were not asked to children. Some measure the consumption of food obtained from hunting and fishing, as well as alcohol and tobacco use. Measures of safety are extended to cover the concept of "community" safety. Respondents are asked to evaluate whether they feel safe in their community, and to report whether they have been assaulted in the past year.

Finally, the table provides measures of the degree to which respondents consider specific social issues as problematic. These include: suicide, unemployment, family violence, sexual abuse, alcohol and drug abuse etc. Respondents are also asked whether social problems could be overcome by specific programs. These include: increasing policing, shelters for abused women, family counselling, improved community services, self-government, and returning to a traditional lifestyle.

However, these concepts are **not defined**. While some are straight-forward, such as "policing", other concepts are complex and potentially ambiguous, such as "traditional lifestyle" and "self-government". Respondents are likely to have different personal interpretations of their meaning. In turn, this will necessarily influence their answers.

In summary, the APS documents contain a mix of standard statistical concepts and unique survey questions.

Overall, these contribute new dimensions to the current body of statistical concepts on Inuit. Nevertheless, the lack of definitions or specifications of the more complex concepts increases the potential for "**response errors**". These occur when respondents misunderstand questions (Statistics Canada 1993b:304). At the very least, these questions are much more likely to elicit subjective responses.

(b) The Census (1991)

The Census of Canada is the only government statistical instrument that allows for time-series analysis of Inuit socio-economic conditions throughout Canada since 1971 (ITC 1992). This is because it uniformly applies a standard set of statistical concepts to measure the various social and economic conditions in all Inuit communities.

The Census is also the most complex government statistical instrument applied in northern Canada. As opposed to the GNWT surveys or the APS, it allows for the tabulation of both **direct** and **derived** variables. Direct variables are measured from responses to single questions on the Census forms, whereas derived variables are compiled from combinations of answers from respondents. This allows Statistics Canada to tabulate Census data according to over 100 distinct statistical concepts, including: mortality, fertility, migration, family structure, average income, etc (Robitaille and Choiniere 1985: xiii-xv). The sheer number of these concepts will require that this analysis focus only on the most basic socio-economic constructs in the document.

Population concepts

Since 1981, the Census has used 2 definitions of the "ethnic origin" concept. Up to 1971, the Inuit population was measured through "single" ethnic origin, specifically the respondents' paternal line of ancestry. Thus, a person with an Inuk father but an non-Inuit mother would be counted under the category "Inuit", while a person with an non-Inuit father but an Inuk mother would be counted under the father's ethnic origin. Since 1981, the Census has also used a

"multiple ethnic origin" definition, which allows respondents to identify themselves along several lines of ancestry (Statistics Canada 1992a: 19-26). In the example above, a person with "mixed" (Inuit and non-Inuit) ancestors would be counted in the category "Inuit" depending upon his/her choice of self-identification.

Economic concepts

The basic Census definitions of the "labor force" and associated concepts "employed and "unemployed" are identical to those in the LFS (GNWT 1990b). However, as opposed to the LFS, the Census does not include concepts that distinguish between persons who are not in the labour force and want a job, but are not **actively** looking for work. The Census defines someone to be "actively looking for work" only when he/she has been:

> using such job search methods as contacting a Canada Employment Centre, checking with employers, or placing or answering newspaper ads (Statistics Canada 1992a: 65).

The Census allows for several measures of the labor force that are not included in the LFS. For example, the "employed" category is sub-divided into "full-time" and "part-time", where "full-time" is defined as involving 30 work hours or more per week (Statistics Canada 1992a: 62). Furthermore, the labor force concept distinguishes between "experienced" and "inexperienced" labor. The former refers to:

> persons employed or unemployed who have worked since January 1, 1990 (Statistics Canada 1992a: 62).

The latter refers to:

> persons 15 years of age and over who have never worked or who worked only prior to January 1, 1990 (Statistics Canada 1992a: 62).

Labor force numbers are also broken down by 23 major types of "occupation", defined as:

> the kind of work persons were doing during the reference week, as determined by their kind of work and the description of the most important duties in their job (Statistics Canada 1992a: 67).

In sum, labor force activity is defined according to the quality and quantity of work-related activity that occurred during the week prior to enumeration (Statistics Canada 1992a: 66). It is important to note that the Census includes activities

such as hunting, fishing and trapping in its occupation categories. However, the Census does not provide measures of such activities if they occurred **outside** the "reference week".

The Census provides a third basic economic concept that is not included in the LFS document: "total income". The concept is unrelated to labor force activity or occupation. Instead it refers to:

> the total money income received from the following sources during the calendar year 1990 by persons 15 years of age and over: total wages and salaries, family allowances, Federal child tax credits, old age security pension and guaranteed income supplement, Canada or Quebec pension plan benefits, U.I. benefits, other income from government sources, retirement pensions, superannuation and annuities and other money income (Statistics Canada 1992a: 48-49).

It is important to note that the income concept excludes gambling gains and losses as well as income "in kind" such as free meals, living accommodations, etc (Statistics Canada 1992a: 49). As we shall see below, this exclusion has important consequences for statistical studies of Inuit. The income concept does not allow Inuit to report items such as gifts of country food, which forms a vital part of their domestic economy.

Household and Family Concepts

Whereas the RRHS includes only 2 definitions of Inuit households (harvesting and non-harvesting), the Census contains a more extensive range of household and family concepts. Families are classified according to 2 basic types: the "Census Family" and the "Economic Family". The former refers to:

> a now-married couple (with/without never-married sons/daughters living at home), a couple living common-law, or a lone parent of any marital status with at least one never-married son/daughter living in the same dwelling (Statistics Canada 1992a: 119).

The Census Family concept is sub-divided by 6 variables: (1) composition (classification by number of never-married sons/daughters living at home, as well as by their age-groups); (2) household composition (presence or absence of non-census family persons); (3) living arrangements (whether persons are members of a family household); (4) status (whether persons are members of a census family); (5) type (whether a family member is responsible for household payments); (6) structure (whether families are of now-married couples, common-law or single parents) (Statistics Canada 1992a: 121-124).

The Economic Family concept refers to:

> a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law or adoption (Statistics Canada 1992a: 124).

It is sub-divided by 3 variables: status, structure, and type. These variables are defined similarly to those in the Census Family concepts (Statistics Canada 1992a: 125-127).

The "Economic Family" concept is more inclusive than that of the "Census Family". First, it includes a broader range of family types. Second, and more importantly, it may also include two or more Census Families. However, it is also important to note that both concepts restrict the definition of a "family" to persons who live in the **same dwelling**. This restriction is significant for studies of domestic economies in Inuit communities. As we shall see below, this is due to the fact that Inuit economic relationships are based on extended family ties that comprise **many dwellings**.

This concludes the presentation of the basic statistical concepts in government documents that apply to Inuit communities. The following part of the report evaluates the degree of their external validity with respect to contemporary Inuit socio-economic practices and institutions.

PART 3: ASSESSMENT OF VALIDITY OF STATISTICAL CONCEPTS

Part 3 begins with an overview of ethnographic data on social and economic conditions in contemporary Inuit communities. This review, in section 3.1, is restricted to the elements of Inuit society and culture that are directly relevant to the statistical concepts analyzed in Part 2.

Ethnographic data are taken from both primary and secondary sources. Primary sources refer to publications that are directly based on field research (e.g., Wenzel 1991); secondary sources refer to analyses of previously published field data (e.g., Sabo and Sabo 1985). With only a few exceptions, the primary data are restricted to field research conducted during the 1980s and 1990s.

The report uses 1980 as a rough "cut-off" point for two basic reasons. The first is to provide a comparative body of data with which to evaluate the statistical concepts used by government agencies in the 1980's. This is particularly important given the extensive and very rapid rate of socio-cultural and economic change experienced by Inuit since the centralization period. Secondly, in-depth research on several Inuit socio-cultural and economic practices has only been carried out over the last decade.

Section 3.2 contains the main analysis of this report, namely, an evaluation of the degree of fit between the statistical concepts reviewed in Part 2 and the socio-economic data synthesized from the ethnographic literature.

3.1 ETHNOGRAPHIC DATA PERTAINING TO SELECTIVE SOCIO-ECONOMIC CONDITIONS IN CONTEMPORARY INUIT COMMUNITIES

For the most part, the approximately 36,000 Inuit in Canada live in 50 communities spread throughout the coastal regions of the Northwest Territories, northern Quebec and Labrador. The population is distributed very unevenly between these regions: over 20,000 Inuit live in 34 communities in the NWT; more than 6,000 are distributed among 14 communities in northern Quebec; and about 4,000 live mainly in 5 communities in Labrador (Statistics Canada 1993c:2-3).

Inuit communities are very small by southern Canadian standards, having total populations under 5,000 persons. However, by northern standards the population size of Inuit communities varies significantly. The two largest communities where Inuit comprise a majority (Iqaluit and Inuvik) have total populations with more than 3,000 individuals. One of the smallest communities, Grise Fiord has fewer than 100 persons (Pauktuutit 1990: 12-32).

This variation in population size has important implications for the socio-economic conditions that characterize contemporary community life. The larger centres such as Iqaluit, Rankin Inlet and Inuvik differ significantly from the smaller, both in infrastructure and in the availability of social and economic services. In addition, most of the larger communities are regional administrative centres, and tend to have a significantly higher proportion of non-Inuit (non-Native) residents.

In light of these differences, the following synthesis of ethnographic data must be interpreted with some caution. The cultural practices and economic conditions mentioned below characterize contemporary Inuit life in all northern communities. However, their prevalence varies between communities.[xiii]

3.1.1. ECONOMIC STRUCTURES AND PRACTICES

The contemporary economy in Inuit communities dates back to the end of the population centralization phase in the Canadian Arctic, which occurred in the early to mid-1960's (Wenzel 1991: 34). During this period, the Inuit population abandoned year-round life on the land in order to move into permanent communities. Ideally, this move would provide the same range of social and economic services that were received by other Canadians: housing, social assistance, education, and health care (Duffy 1988).

The Inuit economy is best defined as "mixed". It involves a cash-based, wage-oriented dimension, as well as a subsistence dimension, based on renewable resource exploitation and a sharing or redistribution system (Riches 1982; Smith 1989; Wenzel 1983, 1989). A description of the cash-based dimension will be followed by a description of the subsistence dimension. While this separation is necessary for analytical purposes, it does not reflect economic realities in Inuit communities. Consequently, this analysis will conclude with a description of how these two economic dimensions are integrated through the Inuit system of social organization.

a) The cash-based economy and wage-labor

Inuit are involved in the cash economy in 4 ways: (1) direct participation in wage-labor; (2) production and sale of arts and crafts; (3) sale of furs and sealskins obtained through hunting and trapping, and; (4) government transfer payments (including social assistance) - family allowances, old age benefits and pensions, unemployment insurance and welfare (Wenzel 1989: 7).

Inuit participation in wage-labor has increased gradually since the centralization of the population. However, it still remains limited throughout the Canadian Arctic. Table 1 below compares the Inuit participation in the labor force between 1981 and 1991:

TABLE 1: INUIT LABOR FORCE PARTICIPATION, 1981 AND 1991

(Sources: Chartrand and Prattis 1986:34;
Statistics Canada 1993b:xlvi)

Total Inuit	**1981 Total**	**%**	**1991 Total**	**%**	**(*d*) 1991-81**
Pop.15yrs+	14,505		20,805		6,300 (43%)
In L. force	6,990	48	11,910	57	4,920 (70%)
employed	5,925	41	8,935	43	3,010 (50%)
unempl.	1,065	7	2,975	14	1,910 (179%)
unempl. rate			15		25
Not in L. force	7,515	52	8,895	43	1,380 (18%)

In 1981 for Canada as a whole, the total Inuit population of working age (15 years or more) was 14,505. By 1991 this number increased by 43% to 20,805, reflecting a very high rate of population growth. Table 1 also shows a significant increase in the proportion of Inuit in the labor force between 1981 and 1991. In 1981, this number stood at 6,990, representing 48% of the working age population. By 1991, the number of Inuit in the labor force increased to 11,910, giving a participation rate of 57%.

While the Inuit labor force grew by 70%, this increase involved a substantial rise in unemployment. Table 1 shows that the **proportion** of employed Inuit has scarcely increased between 1981 and 1991. In 1981, 41% of Inuit of working age were employed, and by 1991, this stood at 43%. The **number** of employed Inuit increased by 50%, from 5,925 to 8,935. However, the number of unemployed Inuit grew by 179%, from 1,065 to 2,975. The unemployment rate (the proportion of the labor force that is unemployed) increased from 15% in 1981 to 25% in 1991. Finally, the number of working age Inuit that are **not** in the labor force increased by 18%, from 7,515 to 8,885. However, this represented a **decline** in the proportion of working age Inuit that is not in the labor force, from 52% in 1981 to 43% in 1991.

This analysis shows several general trends. In an absolute sense, there has occurred a growth in the number of Inuit who are both in the labor force **and** employed. The number of Inuit not in the labor force has also increased. In a relative sense, however, there is a larger proportion of Inuit that have become unemployed. Also, there is a smaller proportion of Inuit that is not in the labor force.

These trends reflect processes of culture change that have occurred since centralization (Dahl 1985; Hobart 1982). As the number and proportion of Inuit with formal education increases over time, there are both: (a) more Inuit seeking wage-employment but unable to find it, and; (b) fewer Inuit making a living exclusively from subsistence activities.

A closer examination of employment patterns reveals that Inuit labor-force participation takes place within a "cultural division of labor" (Prattis and Chartrand 1990). This means that Inuit are under-represented in the higher-ranking occupations in the labor force, such as administrative and managerial positions. Together with their overall low participation rate, Inuit income levels through wage-labor are well below those of the non-Native labor force (Robitaille and Choiniere 1985: 42, 44). For example, in 1991, 67% of working age Inuit reported a yearly income of less than $20,000, while only 7% reported an income of $40,000/year or more (Statistics Canada 1993b:xlvii).

Low levels of employment, and of employment income, have important consequences for the integration of Inuit in the cash-based economy (Hobart 1983). The most obvious implication is that Inuit must look to other sources of income. Traditionally, the fur and sealskin trade provided Inuit with the additional revenue necessary to cover hunting costs. It also enabled them to have a certain level of disposable income that satisfied most of their consumption needs. For example, Wenzel (1989: 14) reports that sealing provided 58% of the total income entering Clyde River, NWT in the early 1970's. Trapping also generated a significant source of cash. For example, Smith (1979-80: 58) reports that one trapper sold 1,600 white fox pelts in 1974, for a total value exceeding $80,000. While this income level is unusually high, successful trappers could typically obtain $20,000 - $30,000 per year in the early 1970's. Income levels from trapping and sealskin sales began to fall dramatically in the late 1970's following the anti-sealing and anti-fur campaigns of animal-rights groups in Canada and Europe.

Table 2 below, collected from Wenzel (1989), illustrates the devastating impact on Inuit income resulting from the 1982 European Economic Community ban on sealskins.

TABLE 2: SEALSKIN SALES AND REVENUE, BAFFIN ISLAND 1980-1985

(Source: Wenzel 1989:16)

Baffin Island	**1980-1981**	**1983-1984**	**1984-1985**
Total sealskins	31,586	5,766	3,747
Total cash value	$ 680,530	$ 52,057	$ 27,420
Av. price/pelt	$ 21.54	$ 9.02	$ 7.31

By 1980-1981, sealskin prices had already declined as the result of an anti-sealing campaign. Sealskin prices were as high as $30.00/pelt in 1974 (Smith 1979-80: 61). Nevertheless, Table 2 can provide a rough estimate of the drop in Inuit income from the sealskin ban. If we assume a total Inuit population of 6,945 for the Baffin region in 1981 (Chartrand 1987: 246), then sealskin sales generated approximately $100 for every Inuk in 1980-1981. If we take the same population base for 1985 - an incorrect assumption given the high growth rate of the Inuit population - then sealskin sales generated less than $4.00 per Inuk in 1984-1985.

The collapse of the fur and sealskin trade resulted in a greater dependence on arts and crafts production, and on social assistance, as forms of supplemental income. For example, in the NWT in 1989, out of a total Inuit population of 9,662 aged 15 years or more, 3,045 were involved in arts and crafts production. This represents 32% of the population. Of this number, 2,507 were involved in arts and crafts production on a part-time basis. This represents 26% of the working-age Inuit in the NWT (GNWT Bureau of Statistics 1989b: 95).

b) The subsistence economy

The contemporary subsistence economy is an adaptation of the "contact-traditional" Inuit way of life. The major part of the "contact-traditional" era spanned the years in which Inuit lived on the land year-round **and** supplemented traditional hunting and fishing with trapping and trading (Damas 1988). This roughly corresponds to the 1920-1960 period.[xiv] The centralization of into permanent settlements brought about several changes to the hunting/fishing/trapping economy (Wenzel 1991:33-34).

The sedentary lifestyle, begun in the late 1950s and early 1960s, imposed constraints on subsistence-oriented activities that could only be overcome through increasing the mechanization of hunting and trapping technology. Centralization brought together an unprecedented number of persons to a single location. This factor, along with the infrastructural changes that were associated with settlement construction[xv], resulted in making local game scarce. This required that hunters significantly increase their travel distance to hunt and fish (Smith 1979-80: 57). Thus, by the late 1960s, hunters and trappers were replacing dog-teams and kayaks with snowmobiles and motorized freighter-canoes (Graburn 1969: 162-163). Mechanization has allowed hunters to increase daily travelling distances to 100-150 miles, from 20-30 miles when dog teams were in use (Smith 1979-80: 2).

However, the increase in the **efficiency** of travel time and production is offset by a decrease in the **self-sufficiency** of the subsistence economy as a whole. For example, dog teams are, in principle, self-reproducing and largely self-maintaining. While working dogs require a large quantity of food, this input is integrated directly within the harvesting activity of the hunter. In contrast, snowmobiles require a substantial cash disbursement, to cover both capital and operating expenses (Kemp 1971).

Several researchers have attempted to measure the cash input and output of the Inuit subsistence economy. There are several problematic issues in the methodologies used in these studies (Usher 1976; Usher and Wenzel 1987)[xvi]. Nonetheless, the data can approximate the costs and benefits associated with subsistence practices. Brice-Bennett (1978: 106) estimated the capital costs of hunting and fishing in Inuit communities in Labrador at $10,314 per hunter. However, this estimate is based on dated prices for several major pieces of equipment (e.g., $3,500 for a snowmobile)[xvii]. Wenzel (1989: 7) points out that, on Baffin Island (NWT), capital costs had already surpassed $4,000 by the early 1970's.

Smith (1989) provides a more comprehensive attempt at quantifying subsistence costs and benefits. His analysis estimates capital equipment costs at $21,130, with a yearly average depreciation of $5,922. These data are more realistic considering that full-time hunters will need to replace major equipment, such as snowmobiles, approximately every 2 to 3 years (Smith 1979-80: 57). Operating costs, for their part, vary directly with the amount of hunting, fishing

and trapping performed. On average, full-time hunters spend nearly 5 times as much time hunting as part-time hunters, and cover almost 6 times the territory (Smith 1989: 95).

A study by Wenzel (1989) illustrates some of the dynamics of hunting. Over a 6 week period in 1984, the researcher accompanied 5 part-time hunters involved in sealing, caribou and narwhal hunting, as well as arctic char fishing in Clyde River, NWT. He reports the following use of time by the hunters:

TABLE 3: BREAKDOWN OF HUNTING ACTIVITIES

(Source: Wenzel 1989)

	Total hrs	**%**	**T.stalking**	**%**	**T.travel**	**%**	**T.repairs**	**%**
Total for all hunters	508	100	268	52	194	38	46	9
Average per	102		44		39		9	**hunter**
Average per	17		7		6		1	**hunter/week**

The 5 hunters spent a total of 508 hours on the land, which represents an average of 17 hours per week for each hunter. In total, hunters used 52% of their time for stalking wildlife; 38% for travelling to and from hunting and fishing areas, and 9% to conduct repairs on their equipment.

A major difficulty in estimating the costs and benefits of subsistence activities is that their products (food, clothing, etc.) are **consumed directly**; i.e., they do not enter the marketplace. The most common method used to estimate the cash value of subsistence harvesting is to substitute store-bought meat for country foods (by weight) and impute local prices (Usher 1976).[xviii]

Using this substitution method in Holman, NWT, Smith (1989: 94-96) estimates that a full-time hunter will produce $17,117 in food per year, while a part-time hunter will produce $9,346. The replacement value of country food was obtained by averaging local store-bought meat prices ($10.56/Kg or $4.79/lb) and estimating daily country food consumption at 0.36 Kg (0.79 lb). The average cost of country food production is estimated at $1.01/Kg ($0.46/lb) for full-time hunters, and $5.65/Kg ($2.59/lb) for part-time hunters (Smith 1989: 96).

These data suggest that subsistence activities are considerably more cost-effective when conducted on a full-time basis, rather than part-time (Kemp 1971; Breton et.al., 1984). However, they also suggest that even part-time harvesting will produce cash savings when compared to purchasing an equivalent quantity of meat at retail store prices.

The **savings** in store-bought food constitute an important linkage between the subsistence and cash-based dimensions of Inuit economy. However, since the collapse of the fur and sealskin trade in the 1980s, subsistence activities no longer generate "revenue". In fact, the capital and operating costs of mechanization require a net cash output (from wage-labor, transfer payments and arts and crafts production).

Therefore, the maintenance of the Inuit subsistence economy depends upon maintaining links to the cash-based dimension. These links must be flexible enough to allow hunters use cash to subsidize their subsistence activities. Transfer payments, for example, were never intended to serve this purpose. In fact, it is illegal for hunters to use some types of transfer payments, such as welfare, to subsidize hunting. The following section describes the practices currently used by Inuit to articulate the subsistence and cash-based dimensions.

c) The social organization of economic activities

The extended family[xix], or *ilagiit* is the fundamental social and economic unit of Inuit society. In contemporary communities, formal institutions have overtaken many of the functions that were performed through extended family structures. However, the *ilagiit* continues to act as the basic institution within which everyday socio-economic interactions take place (Wenzel 1991: 101). In order to understand how these interactions work, it is first necessary to examine the Inuit kinship system.

The primary function of any kinship system is to determine family membership. The Inuit system is designed to maximize connections between family members. Descent is bilateral, meaning that ancestry is recognized through both male and female lines (Damas 1963). Authority in the *ilagiit* usually resides in the oldest male who acts as the "leader" of the extended family group. This "leader" is referred to by the title of "*isumataq*", which can be roughly translated as "the one who thinks" (Wenzel 1991: 101).

One of the most important roles of the *isumataq* in contemporary Inuit communities is the redistribution of economic resources within the *ilagiit*. Traditionally, the redistribution system, called *tuqagaujuk*,[xx] focused on meat obtained through harvesting. In contemporary communities, however, this system has expanded to new spheres, and also includes cash (Wenzel 1991: 177). Ideally in the *tuqagaujuk* system, resources are shared "up" to the *isumataq*, who then oversees their redistribution to nuclear family heads (Riches 1982: 69; Wenzel 1991: 101).

In everyday practice, the *isumataq* may not always play an active, or direct role in the resource allocation process. For example, during field research in 1988-1989 in Igloolik, NWT, the author observed several instances in which individual *ilagiit* members cooperated with one another to ensure that meat and cash were shared as needed (Chartrand 1989a: 14). Since the *tuqagaujuk* resource pool is accessible to all members of the *ilagiit*, individuals often simply "help themselves" without seeking (or obtaining) explicit permission. This sharing practice is referred to as *tigutuinnaq*, meaning "to take without asking" (Wenzel 1991: 101).

The authority of the *isumataq* is derived from consensus (Riches 1982: 73-78). The extended family leader thus commands a high degree of respect from its members. This allows him to extend his influence to several aspects of social control, such as dispute resolution between family members. The legitimacy of his decision-making power also allows him to exert moral pressure on *ilagiit* members to share hunting equipment and to create and maintain specific economic "partnerships" (Wenzel 1981, 1983).

The principles underlying the social organization of Inuit economic activities regulate the links between the cash-based and subsistence dimensions of contemporary Inuit communities. They can explain, for example, the persistence of "full-time hunting" - practised by as much as 18% of the adult population in certain communities (Smith 1989: 94). Individuals who lack regular personal access to cash resources may nonetheless hunt full-time through an economic (cash-sharing) partnership with one (or more) relative(s) employed full-time. In return, Inuit involved in full-time wage-labor obtain significant cash savings through their access to, and consumption of, country food.

The following section elaborates the central role of the Inuit kinship system in defining and regulating everyday family relationships and social life.

3.1.2. THE INUIT FAMILY: CONCEPTS AND PRACTICES

All but perhaps the very largest Inuit communities can be viewed as agglomerations of several (from 2 to about 7) discreet *ilagiit*, that are themselves loosely inter-linked by a few ties of blood or marriage. For example, field genealogies collected in Igloolik, NWT, reveal that 97% of the Inuit population was related by either descent or marriage (Chartrand 1989b). The social and cultural importance of family relationships is illustrated further by the fact that 80% of the genealogical data for this community was correctly provided by **one** informant, using only a household membership list as a memory aid.

The concept of the family is central to every aspect of life in Inuit communities. Family relationships are determined not only by biological and marriage ties. In fact, these ties constitute **only one** dimension of Inuit kinship. The latter also includes a complex system that links all aspects of social relations with cosmology (the most inclusive system of cultural beliefs). This system is technically (and from an Inuit point of view, erroneously) referred to in the literature as "fictive kinship".

Inuit "fictive" kin relations include: (1) adoption; and (2) namesake relationships. "Customary" adoption is a social practice that pre-dates the contact-traditional era (Guemple 1979). Its continued widespread use prompted the GNWT to recognize it as a legitimate form of adoption in the 1980s (Pauktuutit 1988: 11). Under customary Inuit law, adoption is sanctioned following a verbal agreement between natural and prospective parents. Often, the adoptive parents are close relatives of the natural parents. Thus, adopted children are almost always raised knowing the identity of their biological parents. It is not infrequent that they will eventually return to live with them (Nuttal 1992: 82). While there are no comprehensive data on the frequency of customary adoption, genealogical data for Igloolik indicate that at least 20% of the population experienced the practice (Chartrand 1989b).

Namesake relationships form the most complex aspect of the Inuit kinship system. They are only indirectly relevant to the scope of this report. Thus, the analysis will provide a rough sketch of the mechanics of this practice, and will then focus on its impact on family composition. As in the case of adoption, this practice also pre-dates the contact-traditional era. Originally, it was linked to the traditional shamanic religious belief system of Inuit cosmology (Saladin D'Anglure 1986).

All Inuit today **appear** to have a naming system patterned after the European system - consisting of a first name followed by a surname or family name; e.g., "Maggie Kamik". However, this system dates back only to 1971, when the Federal government phased out the "Eskimo Disk List" through its "Project Surname" program (Chartrand 1989a: 4).

Prior to 1971, Inuit had two distinct systems of personal identification. The Eskimo Disk numbers were issued by the Federal government for administrative purposes. Irrespective of the disk number, an Inuk would have several different names. Each name represented his/her spiritual relationships with deceased relatives (Guemple 1965; Saladin D'Anglure 1986). Since the introduction of Christianity, the Inuk would also have a (first) name of European origin. Thus until 1971, "Maggie Kamik" would have been identified simply as, for example, "E5-481" in any dealings with government agencies (Suluk 1987). She would likely have been referred to as "Maggie" - her Christian name - by Euro-Canadians in her settlement. However, among her relatives she would be referred to by different Inuit names, "Kamik" being only one among several.

In Inuit culture, "names" represent much more than means of identification. They are direct representations of reincarnated human souls (Nuttal 1992: 5). Inuit culture does not define a soul as an entity in and of itself, as does the Christian religion (Shweder and Levine 1984). Any individual may be given several names and thus represent the reincarnation of several relatives (Nuttal 1992: 60). Each name (soul) carries with it the fundamental characteristics of the deceased relative that can account for the current name-bearer's social behaviour and disposition (Saladin D'Anglure 1986: 69-74).

The namesake system affects the Inuit concept of the family at two levels. First, it more than doubles the number of kin ties between individuals. Second, and more importantly, it provides a radically different dimension of social relationships. For example, two Inuit who are not directly related to one another **biologically** may have the same name, and enter into a kin-based economic partnership (on the cultural basis that they share a common soul).[xxi] Similarly, two biological brothers may have completely different Inuit "surnames", and **appear** to be unrelated. As children, they may reside in different households occupied by distantly-related nuclear families.

Finally, namesakes also determine a person's social gender (Saladin D'Anglure 1986; Guemple 1986). Thus, they allow Inuit men and women to participate in non-traditional economic roles (e.g., household duties for men, hunting for women). A 1987 study conducted in Igloolik, NWT, revealed a moderate correlation between Inuit women's social gender and labor-force participation. There were more Inuit women named after decease male relatives, in wage occupations than one should expect, based on the size of this group in the overall female population (Guay 1988).

The characteristics of the Inuit kinship system described in this section allow for a high degree of flexibility in the social and economic organization of Inuit communities. The following section examines the extent to which the basic government statistical concepts reviewed in Part 2 describe and reflect the social and economic realities of Inuit communities.

3.2 THE EXTERNAL VALIDITY OF GOVERNMENT STATISTICAL CONCEPTS

The government statistical concepts are assessed according to the 4 analytical domains outlined in Part 1.

3.2.1. THE FAMILY AND THE HOUSEHOLD

The ethnographic data indicate that the concepts used by government agencies fail to capture the range of dimensions that define Inuit family relationships. The Census incorporates specific concepts that provide measures of Inuit family structures and composition. However, of the 2 concepts used, i.e., the Census Family and the Economic Family, only the latter is flexible enough to reflect **some** of the characteristics of the *ilagiit*.

The Census Family concept is designed to measure variant forms of the nuclear family. On the other hand, the Economic Family concept potentially defines any group of extended family members, including adopted individuals. However, even the Economic Family concept restricts the "family unit" to residents of discreet dwellings. For its part, the *ilagiit* is typically large enough to incorporate several households living in several distinct dwellings. The Economic family unit is also defined strictly through marriage, blood (or adoption) criteria, whereas *ilagiit* members have **multiple** relationships based on **multi-dimensional** criteria.

However, this does not imply that the Economic Family concept provides invalid measures of Inuit family groups. The concept is partly valid, since it describes a (restricted) aspect of the **ilagiit** unit. Furthermore, some of the aspects of the **ilagiit**, particularly those based on Inuit spirituality, are likely to fall outside the boundaries of statistical study. For example, the namesake relationships that constitute an entire dimension of kin ties may very well be too complex to be measured statistically. On the other hand, it should be possible to develop a more inclusive variation of the Economic Family concept that would measure extended family unit relationships, where members reside in more than one dwelling.

3.2.2. THE ECONOMY: EMPLOYMENT AND PRODUCTIVE ACTIVITY

(a) Labor Force Activity

The labor force definitions used by Statistics Canada and by the GNWT Bureau of Statistics are also problematic in several respects. They both record valid measures of Inuit employment, given the purposes for which the instruments are used. The Census and the APS are intended to provide a "snapshot" of the population, i.e., an inventory of demographic, social and economic conditions **at a specific point in time**. The definition of the concept "employed" reflects this purpose. The LFS documents also draw on this definition, but provide additional conceptual definitions that capture seasonal variations in Inuit employment.

However, employment constitutes only one dimension of labor force activity. The second dimension, unemployment, involves a largely **invalid** application of the "unemployed" concept in all but perhaps the very largest Inuit communities. Most Inuit live in communities with 1,000 persons or less, and with very few sources of employment. Therefore, few Inuit meet the criteria of "actively looking for work".

For example, there is only one regional newspaper in the entire Nunavut area. The few job openings listed in it require skills and education levels that the majority of Inuit lack. Employment opportunities that most Inuit qualify for are usually announced on local radio stations. These positions are usually filled on the same day as the announcement. Therefore, the LFS, APS and Census definitions greatly underestimate the "real" level of unemployment in Inuit communities. Consequently, they over-inflate the "not in the labour force" category and provide an illusion that all of these individuals are not working "by choice".

The 1989 LFS has attempted to rectify this misconception by providing a "want a job" concept that intersects the labor force and not-in-labor force categories. However, the concept also includes individuals who are currently employed but who desire a different job. Therefore, the category represents only a partial solution to providing a valid measure of unemployment in Inuit communities.

Finally, the "not in the labor force" concept is defined as a "catch-all" category that ignores non wage-earning forms of productive economic activity. For example, a person involved in full-time but seasonal hunting and fishing, and who is not involved in wage-labor, is considered to be "not in the labor force". Statistically, the person is thereby equated with someone on welfare, or with a full-time home-maker who stays at home by choice.

(b) Subsistence Production

The Census, APS and the GNWT documents fail to identify the *ilagiit* as the social unit of economic production. The Census lacks concepts that can provide valid measures of the Inuit subsistence economy. Activities such as hunting, fishing and trapping **are** listed under the "occupation" category. However, respondents must restrict their occupational involvement to the reference week on which Census data are based. Since many Inuit hunt, fish, or trap on a seasonal or occasional basis, this measure significantly underestimates their actual participation in these activities. The "occupation" category is the only one in the Census that measures subsistence practices.

The APS **indirectly** measures participation in subsistence production, by recording the number of individuals involved in:

activities which they did to support themselves and their families since January 1990 for which they did not receive money (Statistics Canada 1993b:128).

Since the APS does not specify, or isolate, hunting and fishing, this measure is likely to be more inclusive than subsistence production. A second indirect measure is based on participation in "traditional activities". While the APS does not define this concept, it is also, in principle, more inclusive than subsistence production.[xxii]

Both the LFS (Report No.3) and the RRHS provide different measures of the traditional Inuit economy. The LFS concepts are designed to measure individual participation levels in all subsistence activities, including arts and crafts production, on a year-round **and** a seasonal basis. More importantly, the LFS is the only statistical document that correlates individual participation in subsistence activities with participation in wage-labour.

The APS includes a basic measure of country food consumption. However, the RRHS is the only government document that provides **detailed** measures of renewable resource consumption at household levels. Both surveys exclude measurements, in the form of estimates, of the cash value of country foods.

The only problematic concept in the RRHS is that of "operating expenses" for subsistence production in Tables 24 and 25. Ethnographic data show that operating expenses include considerably more than "gas and ammunition". Equipment repairs and maintenance are important costs that are ignored in the survey. Therefore, the RRHS concept significantly underestimates the actual operating costs incurred by subsistence harvesters.

Overall, and in terms of what they attempt to measure, the main concepts in the GNWT documents have a high degree of validity. However, the documents contain a limited **range** of concepts that apply to subsistence production. Consequently, some aspects of the Inuit domestic economy are excluded from statistical study. For example, the RRHS measures the quantity of hunting, fishing, and trapping equipment owned at the household level. Yet the survey omits any measure of the capital costs of subsistence production, i.e., those incurred in obtaining equipment. The APS has a category that records the number of adults who bought equipment for hunting, fishing, or trapping. However, the survey does not record or distinguish specific types of equipment. The APS also excludes measurements of equipment costs.

3.2.3. CONSUMPTION

Government statistics on Inuit consumption patterns are very limited. The Census and the GNWT documents lack a systematic analysis of consumption. The APS household expenses data measure the number of adults that report consuming several types of goods, ranging from restaurant and take-out food, to supplies for home repairs, entertainment and recreation, etc. The categories used to measure the frequency of consumption are limited to three levels: "all or most of the time", "about half or some of the time", and "none of the time". While these categories provide a very rough indication of frequency, they do not measure the **number of items** consumed within a given time period.

3.2.4. REDISTRIBUTION OF WEALTH

The government documents reviewed in this report do not have statistical concepts that measure redistribution of wealth, in cash and/or in kind. RRHS data **can** be used to indicate that such redistribution is practised in Inuit communities. This is accomplished by comparing: (1) the number of households that report having individuals involved in subsistence production, with (2) the number of households that report having consumed country food. RRHS data show that **72%** of households have "at least one individual involved in hunting and fishing", while **91%** report having eaten "at least some meat and fish obtained through hunting and fishing" (GNWT 1991:6-10).

The difference in percentages **implies** the occurrence of sharing between households. However, this method cannot produce measures of the **extent** to which redistribution of wealth takes place. Ethnographic data, meanwhile, indicate that redistribution forms the cornerstone of the subsistence economy, and that its importance is likely to have increased since the collapse of the fur and sealskin trade in the early 1980s.

The analysis will now shift from an assessment of the external validity of statistical concepts to an assessment of their potential usefulness for social and policy development in Inuit communities.

PART 4: USEFULNESS OF CONCEPTS FOR POLICY DEVELOPMENT

Social and economic policy development in the Canadian north has evolved from a colonial system (lasting throughout the 1960s) to a progressive, albeit partial, devolution of power and decision-making structures to regional and local community levels (Duffy 1988: 195-266; Dickerson 1992: 116-167). The two most recent mechanisms in the devolution of authority are land claim and self-government agreements.

The pace and quality of devolution have occurred unevenly throughout the regions in which Inuit live. For example, communities in northern Quebec first obtained greater autonomy in social and economic policy making through the ratification of the JBNQA in 1975. Inuvialuit (Inuit in the western section of the NWT) ratified their land claim in 1984, while Inuit in the eastern and central part of the NWT ratified the Nunavut land claim agreement in 1992. The Nunavut regional government is scheduled to be instituted in 1999. The Labrador Inuit Association is still negotiating its land claim.

The provisions of the Inuit land claim agreements are too complex to be discussed in detail in this report. Their major features include: (1) land ownership, involving distinct surface and sub-surface rights to resources; (2) cash settlements, mainly earmarked for economic development; and (3) the creation of organizations responsible for co-management of social and economic programs in the settlement areas (Dickerson 1992: 168-192).

Apart from land claim and self government agreements, Federal, Provincial, Territorial and Regional governments have implemented several important economic development programs since the 1980s.
These include, for example, the Canadian Aboriginal Economic Development Strategy (CAEDS) introduced in 1989 and the Economic Development Agreement (EDA) with GNWT in 1987. The primary goals of these programs are to increase Native wage employment, and Native participation in the formal (cash-based) economy. This is to be realized through: economic diversification and small business development; affirmative action programs; the creation of community development organizations; and human resource development (Praxis Research Associates 1994:23).

4.1 SOCIAL AND ECONOMIC POLICY ISSUES IN INUIT COMMUNITIES

(a) Economic Development

Until the 1960s and 1970s, economic development policies centred on promoting large-scale industrial activity based mainly on mineral and oil extraction (Abele and Dosman 1981). Policies also aimed to increase the participation of Inuit in wage employment through economic diversification programs in the public and private sectors (Dacks and Coates 1988). By the 1980s, native northerners and government administrators increasingly realized that development approaches predicated on assumptions that the non-renewable resource economy would generate employment, were unfounded (Hamelin 1984). A history of failed centralized economic programs, and of "boom and bust" cycles of non-renewable resource development (Dahl 1985; Hobart 1983), influenced a move toward diversifying local economies through small business development, and promoting native participation in economic policy development (Praxis Research Associates 1994:22).

By the mid-1980s, economists were recommending that stable growth in Canada's North depended on the expansion of the renewable resource base, and the development of "basic industries" (Stabler 1985:23). These industries included, for example, retail sales, construction, services, and tourism. The development of basic industries was aimed beyond simply profit-making, and toward secondary goals of local employment, training, the provision of services, and stimulation of local economies through import substitution (Whittington 1986).

Until the mid-1980s, the subsistence economy received little consideration at the policy level (Freeman and Carbyn 1988). For example, GNWT manages subsistence activities separately from industrial and other wage-based occupations. Until, and apart from, provisions in land claim settlements, Federal, Provincial and Territorial governments did not consider subsistence economies as legitimate forms of "development" (Praxis Research Associates 1994:22). It is arguable if this perception has changed in any significant manner. For example, GNWT **considered** designing a hunter income support program following the collapse of sealskin and fur prices in the 1980s (CARC 1988). However, no such program was implemented.

The land claim settlements **partly** reverse this trend by promoting the subsistence economy as an important sector that extends economic diversification at the local community level. Both the JBNQA (1975) and the Nunavut Agreement (1992) include hunter income support programs (HISPs), which are intended to offset the destabilizing effects of the collapse of the fur and sealskin trade. However, even the HISPs are based on the perception that renewable resource harvesting is an economic component to be **supported**, as opposed to **developed** (Praxis Research Associates 1994:29).

Lastly, another recent trend in economic development policy is to implement alternative forms of "community-based" development. Certain communities, such as Pangnirtung, NWT, have encouraged the creation of local industries based on tourism and commercial fishing. These are considered to be more "culturally appropriate" than conventional forms of industrial development (Reimer and Dialla 1992). They are also seen as being more compatible with pre-existing types of economic activity.

(b) Social Development

In the 1960s and 1970s, the focus on industrial-based economic development involved a broad set of social policies in housing, health, and particularly in education, that centred on the "modernization" of Inuit culture (Duffy 1988: 51-130). Essentially, this implied the "integration" (i.e., cultural assimilation) of Inuit into mainstream Canadian society. However, over the past 20 years, social policies have increasingly recognized Inuit cultural values and aspirations. This shift has involved changes in social programs ranging from the creation and gradual expansion of partially bilingual (Inuktitut-English) education programs, to the creation of advisory committees at local and regional levels.

The single greatest challenge for social programs at the community level concerns the social and economic well-being of Inuit youth (those aged 15 years and younger). This group comprises nearly 40% of the total Inuit population. Inuit youth face numerous problems of social and cultural adaptation (Condon 1988). These include one of the highest school drop-out rates in Canada, as well as other problems such as chronic substance abuse, sexual abuse, and suicide. The severity of these social problems, in a context of a limited potential for future economic growth, have led some social scientists to predict an increasing trend in Inuit socio-economic dependency (Irwin 1989; Tungavik Federation of Nunavut 1989).

4.2 INTERVIEW ANALYSIS

The interviews with representatives of ITC, Nunavut Tunngavik and Pauktutiit were conducted in the 1st week of June 1993 in Ottawa. The interviews were semi-structured: there were standard questions with a fixed range of answers, as well as open-ended questions. A more detailed description of the interview methods and questions is provided in Appendices "A" and "B". The basic purpose of using a semi-structured format was to allow each organization to indicate its own needs for, or concerns about, government statistics, while also providing a specific set of comparable answers.

The organizations reported having moderate to high degrees of familiarity with government statistics on Inuit. Both the Inuit Tapirisat of Canada (ITC) and Nunavut Tunngavik were very familiar with all of the documents produced by Statistics Canada and GNWT, as analyzed in this report. Pauktuutit was unaware of the NWT Labor Force Survey and the RRHS produced by GNWT.

Concerning the validity of the statistical concepts in these documents, the respondents agreed on the following points:

1. **In terms of what they intend to measure**, government statistics are based on essentially valid concepts. The documents reviewed in this report were ranked on a scale from 1 to 5, with (1) representing a very low degree of conceptual validity, and (5) representing a very high degree of validity. The median for all documents was (4).

2. **Exclusion** of Inuit-specific criteria presents the single greatest limitation on the validity of statistical concepts. ITC pointed out that this "problem" is inherent to certain types of data collection methods, such as the Census. (In other words, it would be counter productive for the Census to incorporate culture-specific concepts for each group in Canada). The organizations agreed that the major drawback with the problem of exclusion was that certain types of statistical data on Inuit need to be qualified and interpreted in social and cultural contexts. Only in very limited cases does the exclusion of Inuit-specific criteria necessitate the outright rejection of statistical data on grounds of invalidity.

However, the responses varied concerning the usefulness of government statistics for social and economic policy development. Nunavut Tunngavik reported that the current sources of government statistics were satisfactory for informing policy development. The respondent pointed out that there is a lack of comprehensive data pertaining to harvesting. He also indicated that government surveys are not designed to reflect or capture many cultural and social aspects of Inuit life. The respondent qualified this comment by acknowledging that certain cultural beliefs and practices would be very difficult, if not impossible, to be described quantitatively.

ITC and Pauktuutit did not address this issue. Instead, their comments focused on the capacity of government statistics to be used for measuring social problems at the community level. In this respect, they reported that government documents were relatively inadequate for informing community-based issues and programs.

ITC was dissatisfied with the level of breakdown of government statistical data. For example, the latter are available only at regional levels in the case of GNWT documents. More specifically, the organization expressed concerns that certain types of economic data, such as income, Unemployment Insurance and other types of social assistance data were unavailable at the community level due to government concerns to protect the confidentiality of respondents. They indicated that concerns about confidentiality are largely unfounded. This is because everyone in the small communities is already (informally) aware of the identities of various income earners and social assistance recipients.

ITC also pointed out that regional level data are often of little use for policy development at local community levels. This is due the skewing of regional level data by certain communities. For example, statistics for the "Baffin" region are distorted by the data for Iqaluit (by far the largest community in the region). Similarly, Kitikmeot data do not reflect important socio-economic differences between communities in the eastern and western parts of the region. A case in point is the community of Holman, for which ethnographic data was presented in Part 4 of this report. Smith (1989) acknowledges that Holman is, on a per capita basis, one of the wealthiest Inuit communities in the NWT. Therefore, data from Holman are likely to be unrepresentative of socio-economic conditions in eastern Kitikmeot communities like Pelly Bay.

Pauktuutit also expressed concerns regarding the lack of community level data on socio-economic issues such as unemployment insurance and welfare. However, the respondent expressed a greater need for community data pertaining to social conditions, such as health and particularly suicide, abuse, and community program and infrastructure information. Finally, Pauktuutit indicated that they could benefit from more pre-analyzed statistical data from government sources. They pointed out that their budget precludes the possibility of hiring analysts who could process and tabulate statistical data in formats specific to their needs.

PART 5: CONCLUDING REMARKS

5.1 EXTERNAL VALIDITY OF STATISTICAL CONCEPTS

There are currently no government sources of statistical data that utilize a full range of concepts with complete external validity when applied to the various demographic, social and economic characteristics of Inuit communities. However, this does not imply that the documents analyzed in this report are, in themselves, invalid. The majority of statistical concepts utilized by Statistics Canada, such as those that measure ethnic origin, fertility, mortality, language, religion, education, etc, involve relatively straight-forward definitions that are not problematic.

Overall, the more complex statistical constructs, which are based on several distinct concepts, are more likely to involve limitations of external validity than the simpler constructs. The "labor force" concept used by Federal and Territorial agencies is an example of this pattern. The labor force construct contains both: (a) a valid concept that measures employment levels, and; (b) a mainly invalid concept (for most Inuit communities) that measures unemployment.

This report also indicates that the most common limitation in the external validity of statistical concepts involves issues of **exclusion** in conceptual definitions, rather than problems inherent in the definitions themselves. To follow the example given above, the concept "unemployed" in the LFS and the Census does indeed measure **part** of the unemployed Inuit population. The problem is that the concept does not capture the full extent of Inuit unemployment. This is because it excludes a large sub-group of the population that does not meet the criteria of "actively looking for work". The problem of exclusion is also evident at a higher level of analysis. Several basic social and economic Inuit institutions and practices are not measured in government studies (the extended family, systems of redistribution of wealth, etc).

In a broader sense, the government documents reviewed in this report contain specific strengths as well as weaknesses. For example, the Census is the only statistical instrument that provides concepts with which to analyze Inuit families. On the other hand, the 1989 LFS and the 1990 RRHS provide a breadth of data on subsistence activities that are completely missing from the Census, and very superficially measured in the APS.

Finally, this report points out that there is a **very uneven availability** of statistical data between the major northern regions in which Inuit live. The NWT is the only government jurisdiction where detailed and comprehensive social and economic statistics based on Inuit ethnic origin are available from sources other than Statistics Canada. Furthermore, until the complete publication of the APS in late 1994, the Census constitutes the **only** source of statistical

data that permits a comparative analysis of Inuit socio-economic conditions between the NWT, northern Quebec and Labrador.

5.2 USEFULNESS OF GOVERNMENT STATISTICS FOR SOCIO-ECONOMIC POLICY DEVELOPMENT

The policy issues reviewed in section 4.1 and the results of interviews with 3 major Inuit organizations indicate that there is a current need for additional statistical data on Inuit. New types of - and more detailed - statistical data would allow Inuit organizations to contribute to improving socio-economic policy development in Inuit communities. The solution to this problem does not lie in revising all government statistical data collection instruments. Instead, it lies in expanding and refining certain questions in survey instruments, such as the LFS, RRHS and the APS.

This report indicates that the availability of statistical data on Inuit in Canada is extremely uneven. The Census and the APS are the only sources that allow for comparative studies of social and economic conditions in all of the regions in which Inuit live. Furthermore, the Census is currently the only such source that allows for time-series analyses. Topically, only the GNWT Bureau of Statistics provides detailed data on the Inuit subsistence economy. Inuit organizations, and government agencies at Federal and Provincial levels could benefit substantially if comparable types of data were available for the Nunavik region of Quebec and for Labrador.

Concerning the availability of community-specific data on social and economic conditions, the Inuit organizations and government agencies seem to be talking past one another by weighing individual and collective needs differently. There are several types of data that do not involve the confidentiality clause, and that could be made available at community levels. Most of the data in the RRHS and LFS fall into this category. This would reduce problems of skewing at regional-level breakdowns in the current documents. This solution would not require designing new surveys, but simply expanding current documents by breaking down regional tables to community levels. Statistics Canada provides community level profiles, for a fee, for both Census and APS data.

Finally, policy development could be better informed by increasing consultation between the government agencies that design and tabulate statistical studies, and the national Inuit organizations who can inform them of specific information needs regarding the Inuit population. The consultation process leading to the creation of the APS represents a positive development in this direction, and could possibly serve as a model for further improvements.

5.3 RECOMMENDATIONS

This final section presents several specific recommendations for improving the current body of statistical data on the Inuit people in Canada.

1. Surveys similar to the GNWT 1989 Labor Force Survey and the Renewable Resource Harvester Survey (1990) need to be implemented **at Provincial levels** in northern Quebec and Labrador, in order to permit **valid, detailed comparative** studies of socio-economic conditions for **all** northern areas in which Inuit live.

2. The categories of "operating expenses" in the RRHS need to be expanded to include items such as fishing, hunting and trapping equipment repairs and maintenance.

3. The RRHS and the APS need to include questions that measure the **costs** of particular household expenses, in addition to current questions that only measure the **number** of persons reporting specific types of expenses.

4. The RRHS and the APS should incorporate questions that measure the **number** of households with which each household **pools** economic resources, by **type** of resource (e.g., hunting and fishing equipment, cash, country foods etc).

5. The LFS "want a job" category needs to be included in the APS as an additional measure of Inuit unemployment.

6. The APS questions on maintenance of "tradition" need to be expanded to list **specific** traditional practices.

7. The APS questions on problems with performing "traditional" practices need to be expanded by listing **specific types** of problems.

8. Data for these lists should be broken down by **gender** and **age group** (e.g., 15-24, 25-44, 45-64, 65+).

9. The full range of APS health and lifestyle questions should be provided to **Inuit youth and young adults** (e.g., those 14 to 25) and the results should be tabulated **for this age group**.

10. Researchers working for Inuit organizations and accredited social scientists should have access to the full range of

economic statistics at community levels.

11. The availability of LFS and RRHS data at community levels should be improved.

ENDNOTES

I. According to the 1991 Aboriginal Peoples Survey there are 3,445 Inuit who reside outside the Canadian north (as defined in this report). This represents 9.5% of the total Inuit population of 36,215 (Statistics Canada 1993c:2).

II. The statistical concepts reviewed in the report apply to the following communities:
NWT: Aklavik, Arctic Bay, Arviat, Baker Lake, Bathurst Inlet, Broughton Island, Cambridge Bay, Chesterfield Inlet, Cape Dorset, Clyde River, Coppermine, Coral Harbour, Gjoa Haven, Grise Fiord, Hall Beach, Holman, Igloolik, Inuvik, Iqaluit, Lake Harbour, Nanisivik, Pangnirtung, Paulatuk, Pelly Bay, Pond Inlet, Rankin Inlet, Repulse Bay, Resolute, Sachs Harbour, Sanikiluak, Spence Bay, Tuktoyaktuk, Umingmaktok, Whale Cove;
Northern Quebec: Akulivik, Aupaluk, Inukjuak, Ivujivik, Kangirsuk, Kangirsujuaq, Kangiqsualujjuaq, Kujjuaq, Kuujjuarapik, Povungnituk, Qaqtak, Salluit, Tasiujaq, Umiujaq;
Labrador: Hopedale, Makkovik, Nain, Rigolet, Upper Lake Melville(unorganized community).

III. Several demographic studies on Inuit were published throughout the 1980s. Readers should consult the following documents, listed in the Reference section of this paper: Beaulieu (1983), Choinière (1986), Robitaille and Choinière (1987a, 1987b), Choinière and Robitaille (1982, 1988a, 1988b), Choinière, Levasseur and Robitaille (1988).

IV. Several resource harvesting studies have drawn on government statistics and/or independent surveys. These include, for example, Mc Eachern (1978), Schaefer and Steckle (1980), Gamble (1984), Ames (1977), and Finley and Miller (1980). Comprehensive evaluations of the methodologies used in harvesting studies were published by Usher et.al. (1985), and Usher and Wenzel (1987).

V. An evaluation of **internal** validity of concepts would involve testing the statistics in government publications (Suchman 1979: 124). This is clearly beyond the scope of this study.

VI. The Settler population dates back to inter-marriages between European men and Inuit women that took place in the late 18th and throughout the 19th centuries (Kennedy 1977: 273).

VII. Paine (1977: 249-263) discusses how "Inuit" and "Settler" ethnic identities have altered over time, and how the boundaries that define their ethnic groups have shifted under particular circumstances. A single-origin definition of ethnic origin will, therefore, prevent many Settlers from identifying themselves as Inuit. This will reduce their numbers in that category.

VIII. There may be a handful of non-Inuit Native People in these areas. Their numbers are so small as to be **statistically** insignificant.

IX. The 1991 Aboriginal Peoples' Survey may be an exception, when all of its results are published by Statistics Canada in late 1994.

X. If we ignore the household classification, the regional levels outlined in the RRHS can be matched - albeit with some imprecision - with those in the LFS and in Statistics Canada documents. This is because the "Nunavut Claim area" in the RRHS includes all communities in the Baffin and Keewatin administrative regions, plus **most** (though not **all**) of the communities in the Kitikmeot. Similarly, the "Inuvialuit Settlement area" and the "Dene-Metis Claim area" correspond **roughly** to, respectively, the Inuvik and the Fort Smith administrative regions.

XI. Statistics Canada has recorded data pertaining to Aboriginal Peoples through the Census for several decades. However, the Census was not administered consistently to Inuit until 197 (For example, in 1961, the Census excluded all Household data for the Northwest Territories - Statistics Canada 1992b: 49).

XII. This APS document, titled The Inuit: A Statistical Profile, is scheduled for publication only in the fall of 1994 (Statistics Canada 1993:7).

XIII. For example, subsistence hunting is practised both in Iqaluit (a large administration centre) and Broughton Island (a small, relatively remote hamlet). However, there are considerably fewer opportunities for wage employment in Broughton Island. Therefore subsistence hunting likely plays a more important economic role, **at a community level**, in Broughton Island than in Iqaluit.

XIV. The duration of the contact-traditional era varied regionally, depending on the establishment of trading posts, and on Inuit access to them (Usher 1971).

XV. Infrastructural changes included building roads and airports which permitted the delivery of an unprecedented supply of southern consumption goods. Supplying isolated arctic communities with these new commodities radically increased scheduled air traffic; in some cases, from one flight per month to several per week. Also, the very high growth rate of the Inuit population has required intense housing construction during the spring and summer months. (It is not unusual to have construction crews working shifts around the clock; see Duhaime (1983)). This level of activity has discouraged game from the areas near settlements.

XVI. The "output" of the subsistence economy is particularly difficult to estimate validly. The main problem is that

there are no substitutes for country foods that are directly comparable. Country foods have a significantly higher nutritional value than store-bought meat (Draper 1977). The best method in current use involves substituting store-bought meat for country food and drawing on local prices to derive a cost estimate. However, this method is still based on an invalid assumption (i.e., that "apples" are equatable with "oranges").

XVII. For example, the full cost of importing a snowmobile to Igloolik in 1988-89 was estimated at over $9,000. This was based on an average retail price of $7,500, plus freight charges and insurance (Chartrand 1989a: 6).

XVIII. Another difficulty with the substitution method is that country foods and store bought meat differ significantly in nutritional value. Country foods have considerably higher calorie and protein contents than store-bought meat (Draper 1977).

XIX. The term "extended family" is used for heuristic purposes only. The correct anthropological concept that describes the *ilagiit* is the **kindred**, defined as "a lateral linkage where Ego [the reference person] is allied with a group of persons who have a relative in common, regardless of whether kinship is traced through men or women" (Damas 1963: 55).

XX. The Baffin dialect of the Inuktitut language is used throughout this section.

XXI. In this case, the two individuals will refer to one another by the term *avvaq*, meaning "my other half".

XXII. Traditional Inuit activities would include cultural practices such as drum dancing, throat singing, etc, which bear no connection to hunting and fishing.

APPENDIX A: METHODOLOGY

A.1 SELECTION OF GOVERNMENT DOCUMENTS

Due to constraints of time and resources, the analysis of statistical concepts on Inuit is limited to the 4 domains outlined in Part 1: (1) the family and the household; (2) employment, work and productive activity; (3) consumption; and (4) redistribution of wealth. This does not represent the full range of government statistics that are currently available. For example, concepts and categories on demographic trends such as mortality, fertility, etc, are omitted from this study. Readers should consult Choinière (1986), Choinière and Robitaille (1982, 1988, 1989) and Choinière, Levasseur and Robitaille (1988) for information of these topics.

The Inuit people have received a growing range of government services and programs since the centralization of the population in the late 1950's and early 1960's (Duhaime 1983; Irwin 1989). Thus, every government department or agency at Federal, Provincial and Territorial levels that collects quantitative data on any aspect of program or service delivery will possess statistical data on Inuit.

However, much of this data is inaccessible. Many government departments consider some of their statistical information as being "sensitive", such as income, welfare and unemployment insurance data, as well as statistics on certain diseases and health problems, etc. This information is considered particularly sensitive when broken by ethnic origin at local community levels. These types of data are usually not released for reasons of confidentiality (ITC 1992: 25-30). Furthermore, few government departments classify and publish statistics by ethnic origin (Choinière and Robitaille 1983: 126). Since the Inuit population differs significantly from other groups in most socio-economic characteristics, it is difficult to obtain reliable estimates specific to Inuit from overall data.

Therefore, this study focuses on government documents that contain Inuit-specific data. Finally, the review of government documents is limited to the most recently published catalogues and reports. This is necessary in order to provide a valid comparison with current ethnographic data on Inuit social and economic institutions. While this report makes occasional reference to statistical studies and ethnographies that pre-date 1980, this is only to situate the analysis in a more comprehensive context.

The documents analyzed in this report are listed below by department and level of government:

(1) Federal government:

Statistics Canada.....{ Census of Canada (1991)

{ Aboriginal Peoples Survey (1991)
-Language, Tradition, Health,
Lifestyle and Social Issues
-Schooling, Work and Related
Activities, Income, Expenses and
Mobility

INAC.....{ Highlights of Aboriginal Conditions
in Canada, 1981-2001

{ Canada's North: The Reference
Manual (Revised 1990)

(2) Government of the Northwest Territories:

Bureau of Statistics.....{ Statistics Quarterly (1980-92)

{ NWT Labor Force Survey (1984)

{ NWT Labor Force Survey (1989)

{ NWT Renewable Resource Harvester
Survey (1990)

(3) Government of Quebec:

Bureau de la Statistique.....{ Région Administrative du Nouveau-
Québec: Charactéristiques de la
Population de Certaines
Municipalités et Certains Découpages
Géographiques (1990)

{ Annuaire du Québec (1965-1975)

(4) Government of Newfoundland:

Statistics Agency.....{ Historical Statistics of
Newfoundland and Labrador (1990)

A.2 SELECTION OF INUIT ORGANIZATIONS AND INTERVIEW DESIGN

Interviews were conducted with representatives of three major Inuit organizations: Inuit Tapirisat of Canada, Nunavut Tunngavik (formerly Tungavik Federation of Nunavut), and Pauktuutit (Inuit Women's Association). These organizations were selected for two reasons. First, they are the only Inuit organizations that are large enough to have the capacity to analyze and make systematic use of government statistics (p.c. Hicks 1993). Second, as the principal advocates of Inuit people in Canada, they can offer comprehensive and potentially unique insights on current and future information needs concerning social and economic issues in Inuit communities.

The interviews involved the administration of questionnaires that consisted of: (a) structured questions with answers selected on ordinal scales, and; (b) open-ended questions. This combination permitted an analysis of comparable answers (between the three organizations), while allowing the respondents to voice issues and concerns specific to their respective organization.

A copy of the questionnaires administered during the interviews is provided in **Appendix B**.

APPENDIX B: INTERVIEW QUESTIONNAIRE

QUESTIONNAIRE:

GOVERNMENT STATISTICS ON INUIT

AND SOCIO-ECONOMIC POLICY

DEVELOPMENT IN INUIT

COMMUNITIES IN CANADA

by:

Jean-Philippe Chartrand

Contract Researcher
Royal Commission on Aboriginal Peoples

1. EXPERIENCE WITH GOVERNMENT STATISTICS ON INUIT

1.1 Does your organization make use of government statistics on Inuit?
(circle one)

yes no
(go to 3.1)

1.2 Which sources of government statistics does it use?
(place 'x')

Federal government:

Statistics Canada (Census) ___
Statistics Canada (Aboriginal Peoples Survey) ___
Indian and Northern Affairs Canada documents ___

GNWT Bureau of Statistics:

Statistics Quarterly ___
NWT Labor Force Survey (1989) ___
NWT Renewable Resource Harvester
Survey (1990) ___
NWT Data Book ___

Government of Quebec Statistics: _____
(specify)
Government of Newfoundland Statistics: _____
(specify)
Other: _____
(specify)

1.3 Which geographic areas do you use statistics for?
(place 'x')

Inuit at National Level ___
Inuit in NWT ___
Inuit in Quebec ___
Inuit in Labrador ___

2. TYPES OF STATISTICAL DATA USED

2.1 What major types of government statistics on Inuit does your organization use?
(place 'x')

General demographic data ___
Data pertaining to social conditions ___
Economic data ___

2.2 What are the major uses of government statistical data on Inuit in your organization?
(place 'x')

Support for position papers ___
Funding ___
Advocacy ___
Specific analyses of social or economic conditions in Inuit communities ___
General information for public ___

3. VALIDITY OF GOVERNMENT STATISTICS ON INUIT

3.1 How would you rate the following sources of statistical data based on their perceived degree of validity?
(i.e., the ability of the major statistical concepts to actually measure what they purport to measure in Inuit communities)
(circle number)
1 = very low; 5 = very high; 0 = don't know

Census	0	1	2	3	4	5
Aboriginal Peoples Survey	0	1	2	3	4	5
NWT Labor Force Survey 1989	0	1	2	3	4	5
NWT Renewable Resource Harvester Survey 1990	0	1	2	3	4	5
NWT Data Book	0	1	2	3	4	5

3.2 In these sources of data, do you perceive any limitations to their capacity to provide valid measures of social and economic conditions in Inuit communities?

(circle one)

yes no

3.3 If "yes" describe the limitations:

_____

_____

_____

_____

_____

3.4 Are there any types of statistical data on Inuit that are currently unavailable but that your organization could benefit from?

(circle one)

yes no

3.5 If "yes", define these types of data:

_____

_____

_____

_____

4. USEFULNESS OF STATISTICAL DATA FOR SOCIO-ECONOMIC POLICY DEVELOPMENT

4.1 Do you consider the current government statistical sources on Inuit as being useful for informing social and/or economic policy development in Inuit communities?

yes no

4.2 If "no", which types of data are not satisfactory?

_____

_____

_____

4.3 How could government statistical concepts be revised to better inform social and economic policy developers?

_____

_____

_____

_____

_____

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