ARCTIC
VOL. 55, NO. 3 (SEPTEMBER 2002) P. 310–317

InfoNorth

Survey of Living Conditions in the Arctic: Inuit, Saami and the Indigenous Peoples of Chukotka (SLICA)

by Thomas Andersen, Jack Kruse and Birger Poppel

ARCTIC SCIENTISTS wrote, in the 1998 *Opportunities in Arctic Research: Final Report* for the U.S. National Science Foundation, "For the last few decades the scientific community has expressed concern about the vulnerability of the Arctic and its residents to environmental, social, and economic changes…[Recent] research results show that arctic climate and ecosystems are indeed changing substantially with impacts on people living in and outside the Arctic." The scientists listed as the first key question, "How are the rapid social, political, economic and environmental changes occurring in the Arctic today affecting the people there?" (ARCUS, 1998:3). Delegates to the 1998 *Inuit Circumpolar Conference* (ICC) passed a resolution supporting an international survey of living conditions in the Arctic. The resolution noted, "Rapid social change characterises all indigenous peoples of the Arctic…There is a need to document and compare the present state of living conditions and the development among the indigenous peoples of the Arctic."

This essay presents a comparative study of living conditions among the Inuit and Saami peoples of the United States, Canada, Greenland, Norway, Sweden, and Finland and the indigenous peoples of the Kola and Chukotka Peninsulas in Russia. The main scientific institutions behind SLICA are Statistics Greenland; the Department of Political Science, University of Tromsø, Norway; the Centre for Research in International Migration and Ethnic Relations, University of Stockholm, Sweden; the Arctic Centre, University of Lappland, Finland; the Barents Centre for Social Research, the Kola Peninsula, Russia; the Russian Association of Indigenous Peoples of the North, Moscow, Russia; the Institute of Social and Economic Research, University of Alaska, Anchorage, U.S.A.; and the Groupe d'études inuit et circumpolaires (GÉTIC) of Laval University, Quebec City, Canada. The main indigenous organizations working with SLICA are ICC, the Saami Council and the Russian Association of Indigenous Peoples of the North.

The project has six major objectives: (1) to develop a new research design for comparative investigations of the living conditions of the Inuit and Saami populations in the Arctic, which will include drawing up of a battery of nominal and operationalized indicators of living conditions based on earlier theoretical literature, consultations with aboriginal organizations, and public hearings; (2) to make a dynamic social analysis of the causal relations between different individual resources and between individual well-being and different political, economic, cultural, and technological settings; (3) to map the living conditions among the Inuit, Saami, and other indigenous peoples in Greenland, Sweden, Norway, and Finland, the Kola and Chukotka Peninsulas in Russia, Alaska, and the Northwest and Nunavut Territories, Nunavik, and Labrador in northern Canada. The mapping will facilitate intra- and international comparisons of the level of the living conditions in a number of dimensions; (4) to improve the basis for decision making in relation to policy planning and implementation; (5) to establish an interdisciplinary network of researchers and research institutions engaged in studying Arctic living conditions; and (6) to educate and involve postdocs, PhD candidates, and undergraduates under the SLICA project.

METHODOLOGY

SLICA employs a hybrid of structured survey and ethnographic techniques to interview a random sample of approximately 23 000 indigenous people in 13 Arctic regions and some 250 communities in the seven countries. Using a series of planned comparisons by region, community type, household type, and individual characteristics, we will examine hypotheses about the effects on living conditions of climate change, relationships of indigenous peoples and states, government policy histories, economic development, and contaminants. We have defined living conditions to reflect the close connection of indigenous peoples with the land and its resources. The core of the survey is based on a model of household organization that includes household composition, domestic production, cash jobs, and sharing of resources among households. Within this context, we extend current conceptual models of well-being to understand people's experiences, expectations and aspirations in the areas of health, social

relationships, societal participation, community infrastructure, and both traditional and Western education.

This effort is a collaboration of indigenous regional organizations and a diverse group of social researchers and survey research experts, involving researchers with experience in large-scale surveys from a number of Arctic research institutions.

Representatives of the indigenous regional organizations have formed advisory boards to oversee the study. Indigenous peoples will work along with researchers to design and implement the study. In accordance with the research principles adopted by the International Arctic Social Science Association, the study will involve community consultation before, during, and after the research. As noted in the ICC resolution in support of this study, "It is essential that there be local participation in the research process to ensure the inclusion of indigenous principles and values; and that indigenous peoples and their representative bodies have knowledge of and a vested interest in participating in this study to the greatest extent possible." In this context, the ICC resolution states, "Now therefore be it resolved that the ICC supports the research project being implemented by an international project team under the guidance of Statistics Greenland: *Survey of Living Conditions in the Arctic: Inuit, Saami, and the Indigenous Peoples of Chukotka and the Kola Peninsula*, which will address these issues in partnership and collaboration with local and regional organisations in each country where research is conducted."

ORIGIN OF SLICA

The initiative for the *Survey of Living Conditions in the Arctic* comes from Statistics Greenland, The Greenland Home Rule Government. In 1994, Statistics Greenland conducted a survey of living conditions in Greenland. Analysis of the data collected in that survey caused researchers in Greenland to re-examine their theoretical and methodological assumptions. They eventually decided that any further research would require a new survey instrument designed specifically for countries in Arctic regions where large numbers of indigenous residents still rely on the harvest of local resources for food. They also concluded that it was more important to draw comparisons between Greenland and other Arctic regions than between Greenland and European countries.

By 1997, Birger Poppel (Chief Statistician, Statistics Greenland) and Thomas Andersen (Project Manager of SLICA, Statistics Greenland) had consulted with researchers, indigenous organizations, and governments in Canada, Norway, Sweden, Finland, the United States, and Russia about the idea of launching an international study of living conditions in the Arctic. In 1998, Statistics Greenland commissioned Statistics Canada to investigate the feasibility of conducting a household survey on living conditions of Inuit people in the Canadian Arctic. In late May 1998, researchers from the seven countries assembled in Slagelse, Denmark, to establish the theoretical, methodological, and organizational basis for a *Survey of Living Conditions in the Arctic*. Following the Denmark meeting, researchers with the Canadian and U.S. teams met in Ottawa, and researchers with the Scandinavian-Russian-Greenlandic teams met in Tromsø and Stockholm in spring 1999.

CONCEPTUAL APPROACH

We have divided our discussion of conceptual approach into two sections: (1) measurement of living conditions; and (2) understanding the effects of global changes (climate, indigenous people-state relationships, government policy histories, economic development, contaminants) on living conditions through regional, community, household, and individual comparisons.

CONCEPT AND MEASUREMENT OF LIVING CONDITIONS

At the first SLICA meeting in Denmark, in 1998, mentioned above, it was discussed how best to define and measure living conditions in the Arctic (McDougall, 1998). The group included representatives from the target populations and researchers representing the disciplines of anthropology, sociology, economics, social psychology, medicine, geography, demography, statistics, political science, linguistics, and law. We considered ten principal factors developing our definition of, and approach to, measurement of living conditions. (1) Individuals experience living conditions in the context of social groups, including households, communities, and indigenous or state governments (Solomon et al., 1980). (2) Provided that there are adequate resources, people choose to apply these resources in different ways (Ringen, 1995). (3) Arctic peoples have often chosen to apply resources such as traditional knowledge and Western education to varying combinations of wage employment, hunting, and fishing activities (Kruse, 1991; McDougall, 1998). (4) Living conditions go beyond standard-of-living measures, which are usually limited to objective indicators of individual resources (Vogel, 1996). (5) Subjective experiences with living conditions are not, in themselves, sufficient since people tend to revise their standards up and down because of their recent experiences and their expectations (see, for example, Felt and Sinclair, 1991). (6) Global indexes of well-being are difficult to interpret and to weight inputs (Allardt, 1975). (7) Arctic indigenous peoples readily conceive of living conditions in terms of how they contribute to community goals and values (Stephen R. Braund & Associates, 1985; McNabb, 1991). (8) Barriers and incentives can affect people's abilities to apply their resources (Ringen, 1995). (9) Arctic indigenous populations currently live under vastly different circumstances, ranging

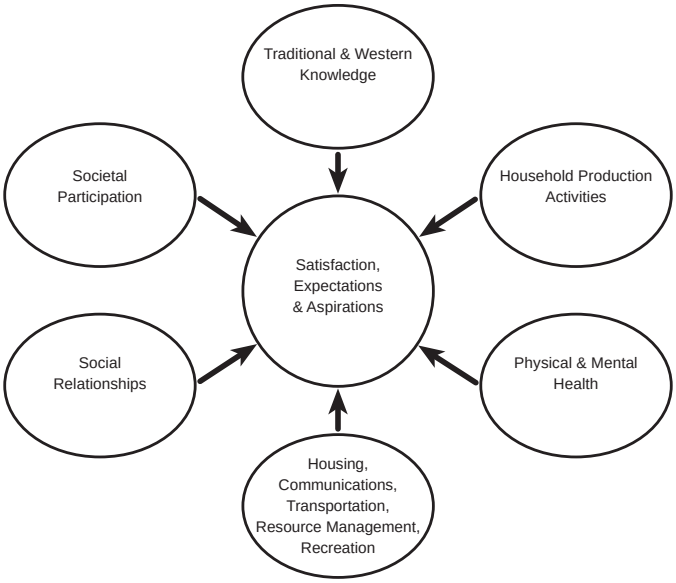

Fig.1. Dimensions of living conditions.

from a virtual absence of reliable food supplies and health services in Russia (L. Abruitina, pers. comm. 1998) to abundant opportunities for employment and harvest of local resources on Alaska's North Slope. (10) We are interested in the relationships between regional differences in policy-relevant histories and living conditions.

These factors lead us to propose the following approach to the measurement of living conditions. (1) We are interested in all aspects of living as experienced by individuals in the context of social groups. (2) Individual experiences with living conditions have objective and subjective components, the latter including satisfaction, expectations, and aspirations. (3) We are interested in the resources that individuals can apply, the ways in which they choose to apply these resources, and the barriers and incentives to the application of resources. (4) We want to organize our dimensions of living conditions in terms meaningful to Arctic indigenous people that can be associated with hypotheses about regional, community, household, and individual differences in living conditions. Figure 1 illustrates our proposed dimensions of living conditions.

Our approach is grounded on the fact that many Arctic Inuit and Saami households are organized to operate within a mixed cash and local-harvest economy. Since the household works as a small enterprise, it is important to understand the role that each individual plays in the household production activities.

The five other dimensions of living conditions forming the outer circle are associated with other community goals and are valued by indigenous people in their own right. These dimensions of living conditions also often serve as resources in household production activities. Examples are social relationships, which produce hunting partners, and traditional knowledge that fosters successful hunts. We are interested in how global changes create barriers and incentives to the development and application of these resources.

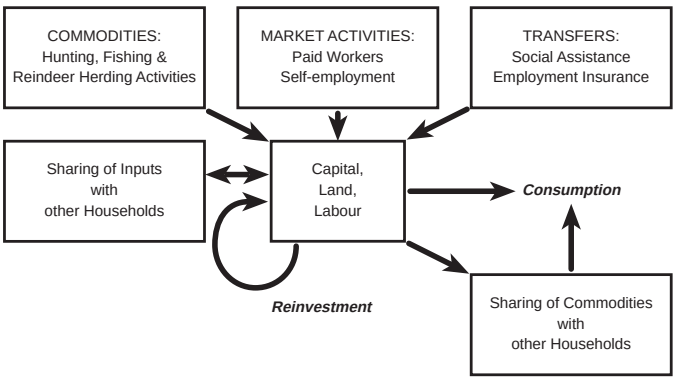

Fig. 2. Model of household production.

We are interested, for example, in whether climate changes are creating barriers to continued harvest of marine mammals, fish, and caribou, or to reindeer herding.

We will examine hypotheses on how climate change, indigenous people-state relationships, government policy histories, economic development, and contaminants affect living conditions through their effect on the resources people use to achieve their goals. We will focus on how these global changes affect the functioning of household production activities and the satisfactions, expectations, and aspirations of individuals.

Our conceptual framework for household production activities (see Fig. 2) is based on the work of Usher (Usher and Weinstein, 1991; Usher, 1992) and depicts the household in a mixed local-harvest and market economy with public and private sectors. It also reflects transfers of inputs (particularly labour and capital) and commodities (particularly harvest products) between households. Most studies to date have focused either on the estimated contribution of local harvest activities to the household or on more standard indicators associated with market activities.

We also recognize that Western-based measurement techniques, particularly those involving the translation of abstract concepts like "satisfaction," can produce misleading results (McNabb, 1990a, b). For this reason, we propose to employ a blend of structured and ethnographic techniques during the interview. In practice, this will mean that we will treat the respondents' volunteered remarks as data in addition to their categorical responses to structured questions. We will train interviewers to probe for the meaning of the respondent's remarks, asking and recording this conversation in the indigenous dialect when appropriate. We will use local interpreters when our interviewers are not fluent in the indigenous dialect. We will obtain professional translations of material recorded in indigenous dialects to assure accuracy.

QUESTIONNAIRE DESIGN

The questionnaire design is a product of the international team of SLICA. At the 1998 meeting in Denmark,

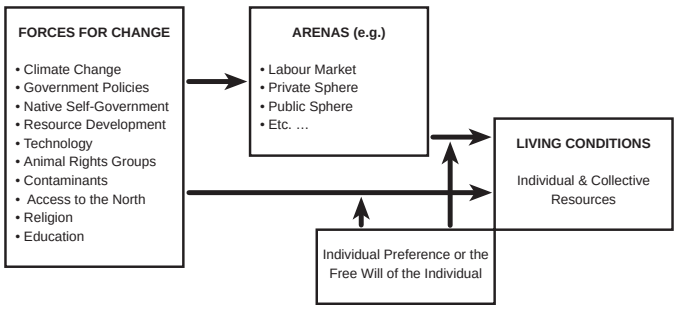

Fig. 3. A model to explain and describe living conditions among Inuit and Saami in the Arctic.

researchers from the eight regions established the theoretical, methodological, and organizational basis for the *Survey of Living Conditions in the Arctic: Inuit, Saami and the Indigenous Peoples of Chukotka and the Kola Peninsula* (McDougall, 1998). Since the first SLICA meeting in Denmark, members of the international board have met in Ottawa, Rovaniemi, Washington D.C., Nuuk, Tromsø, Stockholm, Quebec, London, and Lisbon to develop an outline of questionnaire topics, from which we derived the topic headings shown in Table 1. The International Managing Board, consisting of eight country coordinators (two in Russia), has reviewed and approved regional work products. The first draft of the international questionnaire was completed in October 2000. Following training of the regional study directors in survey research techniques, formal pilot tests were conducted during spring 2001.

FORCES FOR CHANGE

The value of a circumpolar comparison of living conditions is to better understand how differences in structural change affect the individual and collective resources of culturally related groups. Our next task, then, is to identify the major forces for change that have affected freedom of choice, either by altering the resources people have or by causing them to choose new arenas for which their resources are more, or less, sufficient. Kruse and Hanna (1998) identified ten forces for change in the Arctic (Fig. 3). Figure 3 describes the causal relations between forces for change, arenas, and living conditions. This approach focuses on capabilities—resources applied in arenas—rather than on outcomes. We need not try to explain hunting and fishing, wage employment, or traditional social relationship outcomes as a function of specific forces for change; rather, we attempt to explain differences in resources as a function of these specific forces for change.

TIME SCHEDULE – OR WHERE ARE WE NOW?

The project is divided into major two phases:

- **Phase 1**: The development of a new research design for comparative investigations of living conditions of the Inuit and Saami populations in the Arctic. This process involves implementing pilot studies based on questionnaires derived from the theoretical development phase. This phase will result in a publication containing the rationale of this work, the research design, the results of the pilot studies, and the final questionnaires.

- **Phase 2**: The implementation of a survey based on Phase 1 among Inuit and Saami peoples in the Arctic and other indigenous peoples in the Chukotka Peninsula. Approximately 23 000 individuals will be interviewed. The results will be published in a number of regional and international publications.

On 1 October 2001, SLICA completed Phase 1, which included the development and pilot testing of a new research design for living-conditions research among Inuit and Saami peoples in the Arctic. The international SLICA questionnaire, progress reports, and feasibility studies are available at the official SLICA homepage: **http://www.iser.uaa.alaska.edu/projects/Living_Conditions/index.htm**. Phase 2 will be concluded in the year 2004. Table 2 illustrates the progress in the different regions of SLICA.

PROJECT ORGANIZATION

Statistics Greenland co-ordinates the international project, while the eight country coordinators are responsible for national project implementation. A research team is appointed in each country by the country co-ordinator. The international management board consists of the country coordinators and Birger Poppel, Head of Statistics Greenland. Besides this, there exists an international methodology group, whose purpose is to handle methodological issues related to questionnaire construction, data collection, and data validation. Finally, there are two international working groups, consisting of country coordinators and some of the members of the national research teams; one covers the North American area and the other, the Scandinavian-Russian-Greenlandic area. These working groups secure a close connection between the researchers in the main areas of the project and serve, together with the management board, as locus for the theoretical project development. The SLICA country co-ordinators are Professor Jens-Ivar Neergård, University of Tromsø, Norway; Professor Hugh Beach, University of Uppsala, Sweden; Professor Eline Helander, University of Lappland, Finland; Project Manager Thomas Andersen, Statistics Greenland, Greenland; Professor Gerard Duhaime, Université Laval, Canada; Professor Emeritus Jack Kruse, University of Anchorage, United States; Larissa Abruitina, M.D., Russian Association of Indigenous Peoples of the North (RAIPON), and Professor Oleg Andreev, The Barents Centre for Social Research, Russia.

TALBLE 1. Topic headings for the Arctic Living Conditions survey questionnaire, based on discussions with the United States/Canada Team.

Section A: Individual Characteristics
- Persons by age, sex, relationship, ethnicity
- Duration of residence in community and other residence locations

Section B: Production
- Wage employment activity by person (all variables for 12 months)
- Social relationships supporting wage employment
- Hunting and fishing activity by person
- Social relationships for hunting and fishing
- Aggregate harvest consumed by household
- Aggregate harvest shared by household
- Aggregate harvest received by household
- Childcare by person
- Country food processing by person
- Crafts, art, production activities by person
- Non-wage income to household, including transfer payments

Section C: Production Resources

Part 1: Health
- Hearing, speaking, seeing, walking, carrying, mobility
- Learning, emotional health
- Wage work activity constraints
- Hunting and fishing activity constraints
- Household work activity constraints

Part 2: Wage Employment Resources
- Formal education
- Job training
- Months want to work, not want to work
- Perceived job opportunity options
- Experience in non-local employment
- Transportation constraints
- Childcare constraints
- Job satisfaction
- Job expectations
- Job aspirations

Part 3: Hunting, Fishing, and Processing Resources
- Education in hunting, fishing, processing
- Aboriginal language use
- Shared equipment, gas, money, labour
- Abundance of major wildlife resources
- Health of major wildlife resources
- Perceived harvest constraints
- Regulations
- Weather/climate (e.g. sea ice, fall storms, deep snows)
- Accessibility (e.g. barriers to travel)
- Equipment
- Commercial markets
- Processing capabilities
- Food storage
- Hunting/Fishing/Processing satisfaction
- Hunting/Fishing/Processing expectations
- Hunting/Fishing/Processing aspirations

Part 4: Political Resources
- Influence on wage employment
- Influence on formal education
- Influence on hunting, fishing
- Influence on traditional education
- Aspirations for influence
- Expectations for influence

Section D: Expenditures and Consumption
- Household budget
- Household time use: work, domestic, leisure
- Food: sufficiency, diet, in-kind supplements
- Water: quality, sufficiency
- Housing: type, condition, subsidies
- Utilities: heat, electricity, light, cooking
- Clothing
- Equipment, supplies
- Health care: accessibility, cost

Section E: Social Relationships & Ethnic Identity
- Where you go for different kinds of help
- Gifting, sharing
- Ethnic identity

Section F: Community Resources
- Communication
- Transportation

Section G: Subjective Well-being
- Spirituality
- Social relationships
- Social support
- Social adjustment
- Ethnic identity

(Other living conditions dimensions shown above)

FUNDING

SLICA has received funding from the Nordic Council of Ministers, the Greenlandic Home Rule Government, the Commission for Scientific Research in Greenland, the Barents Secretariat, the North Atlantic Research Programme, the Danish Research Council of Social Science, the Swedish Research Council of Social Science, the Joint Committee on Research Councils for Nordic Countries, the Social Sciences and Humanities Research Council of

TABLE 2. Status of SLICA project in the various regions.

	Questionnaire Design	Pilot Tests	Data Collection
Alaska/U.S.A.	X	X	X
Canada	X	X	X
Chukotka	X	X	Fall 2002
Kola Peninsula	X	X	Fall 2002
Greenland	X	X	Spring 2003
Norway	X	X	Fall 2002
Sweden	X	X	Fall 2002
Finland	X	X	Fall 2002

Canada, the National Science Foundation (USA), Statistics Canada, and the Norwegian government.

PUBLICATIONS

The following publications have been planned for 2003 and 2004:

1. Measuring Well-Being Among Inuit and Saami Peoples in the Arctic.

2. Arctic Life – Traditional Living in Modern Contexts.

3. Studying Living Conditions in the Arctic – A New Framework for Living Conditions Studies among Indigenous Peoples in the Arctic.

4. Living Conditions in the Arctic – Reports 1–3.

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Thomas Andersen, Project Manager, SLICA, Statistics Greenland. E-mail: than@gh.gl; Jack Cruze, SLICA Coordinator for the United States. E-mail: asjak@uaa.alaska.edu; Birger Poppel, Project Chief, SLICA, Statistics Greenland. E-mail: birger@gh.gl