

# Traditional food and participatory research: a Canadian experience

Traditional/country food has a central role in the life and health of indigenous peoples in the north. Unfortunately, there is a general declining trend of the use of traditional food in northern Canada. **BY LAURIE H.M. CHAN AND HARRIET V. KUHNLEIN**

Indigenous peoples have clear perceptions of factors contributing to environmental change, lifestyle change and ultimately to dietary change. These factors have been described to include: a reduced density of species and available harvesting areas; restricted harvesting in accessible areas; time and energy limitations for traditional harvesting; interruption of knowledge transfer to youth due to employment of adults and schools for children; availability and accessibility of new food products; acceptability of new food products as a result of media, social contact and education; and concerns for wholesomeness and the presence of contaminants in traditional food.

To study the importance of traditional diets, researchers at the Centre for Indigenous Peoples' Nutrition and Environment (CINE) at McGill University in Canada conducted three comprehensive dietary surveys in the last ten years in 44 communities in the Canadian Arctic and sub-Arctic regions with the support, participation and guidance of Aboriginal partners including the Inuit Tapiriit Kanatami of Canada, Dene Nation, Métis Nation of the Northwest Territories, and Council of Yukon First Nations. Participants were randomly selected for interviews, and a total of 3689 interviews were made. Approximately 600 food items prepared for consumption were sampled for analysis of nutrients and contaminants. Traditional food was reported as being consumed frequently and included a large variety of species and body parts. Traditional food used by Dene/Metis, Yukon First Nations and Inuit communities included 62, 53, and 129 animal species and 40, 48 and 42 plant species respectively in the three areas. The proportion of energy from tra-

ditional food varied among communities and seasons, ranging from about 10 to 40 percent of all calories in the average day from traditional food.

Traditional/country food also provides economic benefits to families. Many respondents in communities stated that they would not be able to afford all their food needs, if required to buy it from the store. The majority of respondents also stated that harvesting and using traditional food by the family provided many benefits, such as improved physical fitness and good health, and as a way for adults to model responsibility for their children.

Throughout Canada, indigenous peoples are assuming a greater role in determining the kind of research that takes place with them. Research projects on health and nutrition issues, in particular, require support from community leadership councils and individual participation. A good partnership between research scientists and the communities ensures the relevance of research objectives, the appropriateness of the methodology and the effectiveness of the communications of the results and the overall success of the project. For example, the dietary surveys conducted by CINE were community driven and involved community agenda setting, and community participation. Results were freely shared with northern communities. Cultural traditions with respect to the ownership and use of traditional knowledge were respected. The format and time frame of the release of any information resulting from the research activities were agreed upon by all parties (the university, its researchers, partners and participating communities) in advance. Students and researchers

joining the project were trained to respect traditional knowledge and community participation. Research results were communicated to the communities in plain, easily understood language, and in an appropriate dialect. Based from the CINE experience, the World Health Organization recently published a document titled *Indigenous Peoples and Participatory Health Research – Planning and Management and Preparing Research Agreements*. The document may serve as a template of basic principles to be observed in planning, organizing, and carrying out research on Indigenous health issues.

**LAURIE H.M. CHAN** is an Associate Professor and holds a NSERC Northern Research Chair in Environmental Contaminants, Food Security and Indigenous Peoples of the North at McGill University. **HARRIET V. KUHNLEIN** is a Professor in Human Nutrition at McGill University. She is the Founding Director of the Centre for Indigenous Peoples' Nutrition and Environment and was recently awarded the Jack Hildes medal in 12th International Congress on Circumpolar Health.

The Centre for Indigenous Peoples' Nutrition and Environment (CINE) opened in 1993 in response to a need expressed by Aboriginal Peoples in Canada for participatory research and education to address their concerns about the integrity of their traditional food systems. The mandate of CINE is to undertake, in concert with Indigenous Peoples, community-based research and education related to traditional food systems. The empirical knowledge of the environment inherent in indigenous societies is incorporated into all its efforts. Governance of the CINE is provided jointly by the Assembly of First Nations, Council of Yukon First Nations, Dene Nation, Inuit Circumpolar Conference, Inuit Tapiriit Kanatami, Metis Nation (NWT), and the Mohawk Council of Kahnawake. The Centre is interdisciplinary and based at McGill University's Macdonald Campus in the Faculty of Agricultural and Environmental Sciences. See [www.cine.mcgill.ca](http://www.cine.mcgill.ca) for more information.



**ABOVE** ESA's satellite for environmental monitoring – Envisat.  
**LEFT** James Bay, Canada in summer and winter.

## Northern eyes in the sky

A new initiative is helping to make better use of satellite data for monitoring the environment in the north. **BY KEITH FINLAYSON**

The European Space Agency and the European Commission are sponsoring a global initiative to facilitate the use of Earth Observation data in the monitoring of the environment. Northern View is a key component in the initiative, and draws its name from its geographical focus of the north and Arctic.

A wide range of collaborators, including governmental and inter-governmental agencies, the private sector and NGOs

are working together to operationalize Earth Observation services to detect oil spills and discharges, track ice bergs and sea ice, and monitor glaciers, snow and land-cover. In addition Northern View welcomes – and actively seeks – the participation of end-users to design and implement new Earth Observation services, and link them into other sources of environmental information.

**KEITH FINLAYSON** is GRID-Arendal's Polar Program Manager and a member of the Northern View strategy team.

You can learn more about Northern View at [www.northernview.org](http://www.northernview.org). You may also like to check out a very practical earth observation trial service in northern Canada that provides updates on the position of the sea ice-edge that is much-used by the local communities in the region: visit the floe edge at <http://ice-glaces.ec.gc.ca>.

## There and back again: accessibility is the key

Though the indigenous peoples' communities in Russia may seem more reachable now, the accessibility of the remote settlements, government bodies and sources of information continues to be the hurdle for improvement of self-governance, education and health. **BY TAMARA SEMENOVA**



**ABOVE** The distance between Naryan-Mar (capital of Nenets region) and the Kanin Peninsula is far. It is necessary for the project team to travel by helicopter.

More than 200,000 people live in the Russian north. The area of their traditional territories is very extensive and spreads from Karelia in the west to Chukotka in the east, and from Taimyr in the north to Buryatia in the south. But getting access to these remote communities is a struggle both for the people living there and people from the outside. Issues varying from education, health care and information to availability of primary facilities like plumbing, is often aggravated by the difficulties in accessibility to these communities.

The importance of accessibility to the Russian indigenous communities and its effect on the communities' health and environment has been assessed by the all-Russian non-governmental umbrella organization Russian Association of Indigenous Peoples of the North (RAIPON) within the framework of the project: Local Health and Environment Reporting by Arctic Indigenous Peoples, conducted in partnership with GRID-Arendal. The project is the first study extensively covering this issue in the Russian north.

The total indigenous population in Russian rural regions is approximately 150,000 people, residing in over than 750 settlements, which considerably vary in size, natural and geographical conditions. They are mostly located in the boreal zone, and only a limited number of tundra settlements belong to the Arctic zone. The population of a northern settlement falls within the range of 1 to 9,000 inhabitants, its average size being 200 people. These are relatively small settlements, which significantly differ in the proportion

of indigenous population. In general, the smaller the community – the larger this proportion is.

The study has indicated that, due to the remoteness, local aviation is, by far, the prevailing means of transportation to northern settlements. In 55 percent of cases local aviation is a predominant and in 37 percent – the only means of transportation to the regional administrative center. Cars, 4-wheel drives and tractors are used in 33–40 percent of the communities; motorboats and snow mobiles – in 28 and 21 percent, respectively. Thirteen percent indicate motorboats as their main means of transportation. The motorcycles, buses and speed motorboats are used in 11–17 percent of the communities, but if there is a regular bus line to a regional center, bus is the main vehicle for commuting.

The indigenous communities' access to governmental bodies and power structures seems to have slightly improved. Naturally, the most accessible ones are reported to be local council deputies and local militia, then comes district administration and finally regional authorities. Deputies of the national (federal) level are regarded as practically inaccessible. RAIPON's local and regional chapters are perceived as much more open bodies to indigenous people.

Northern communities are very isolated and their access to mass media is of high importance to residents. Television and radio are reported to be out of reach in 27 and 15 percent of the communities, respectively, and 64 percent are not able to receive regional or national periodicals.

**TAMARA SEMENOVA** is research and project coordinator in RAIPON.

For the project report see [www.raipon.org](http://www.raipon.org).