Climate changes predicted for the Canadian Arctic are now supported with observational-based scientific data (ACIA, 2004; IPCC, 2001) as well as Aboriginal observations (Communities of Nunavik et al., 2005). It is in this region of the world where changes and impacts to ecosystem and human health are potentially the greatest (IPCC, 2001). Changes taking place to date include modifications in migration patterns of animals, temperature, precipitation regimes, later freezing and earlier break-up of ice as well as decreases in some plant and animal populations. In some cases, these changes are impacting the access to and availability of traditional foods, which are critical to the health of Inuit communities because of their nutritional, social and cultural importance (Blanchet et al., 2000). Traditional foods make significant contributions to daily intakes of protein, various vitamins and n-3 fatty acids, which provide protection against cardiovascular disease (Dewailly et al., 1996). As a result, concerns surrounding traditional food availability and access and health related issues have been identified in some Nunavik communities (Communities of Nunavik et al., 2005). In order to better understand the potential for climate change impacts on Inuit health, it is important to determine the impacts of environmental change on the security of traditional food access and availability.

**Abstract**

The purpose of this project is to identify the key factors influencing the vulnerability of household traditional food security in the face of climate and environmental change in the Canadian Arctic. Through an analysis of environmental, socio-demographic and economic characteristics among a representative sample of households in the community of Ivujivik, Nunavik, this project hopes to identify the key factors putting some households more at risk to climate and environmental impacts on their availability and access to key traditional foods. The results of this project will be relevant to future efforts in developing adaptation strategies for individuals and households in communities more likely to be affected by some of the consequences of climate change.

**Research Approach and Key Concepts**

To facilitate adaptation, it is important to know the nature of vulnerability, in terms of who and/or what are vulnerable to a particular stress (Ford and Smit, 2004). This research uses a vulnerability approach to characterize some human impacts of climate change. Vulnerability is conceptualized as a function of the exposure to climate-change effects and the adaptive capacity to deal with that exposure (Ford and Smit, 2004). Adaptive capacity refers to the potential, capability or ability of a community to respond to climate change stimuli, effects or impacts (Smit and Pilifosova, 2001). Negative impacts at various scales result when stressors or perturbations exceed the ability of the place-based human-environment system to cope or respond (McCarthy et al., 2004). Based on a framework for analyzing vulnerability, the effects of climate change can be examined by investigating the question: “To what combination of stresses is the human-environment system most vulnerable?” (McCarthy et al., 2004). This implies that climate change does not occur in isolation from other conditions influencing vulnerability. Various determinants of adaptive capacity have already been identified and include: economic resources, technology, infrastructure, information and skills (IPCC, 2001). It is expected that by understanding household vulnerability to climate change and other factors for the availability and accessibility of traditional foods, this study will help inform future adaptation strategies to cope with the adverse effects of climate change on the most “at risk” segments of the population.

**References**

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