

CLIMATE CHANGE AND COUNTRY FOOD SECURITY IN IVUJIVIK, NUNAVIK

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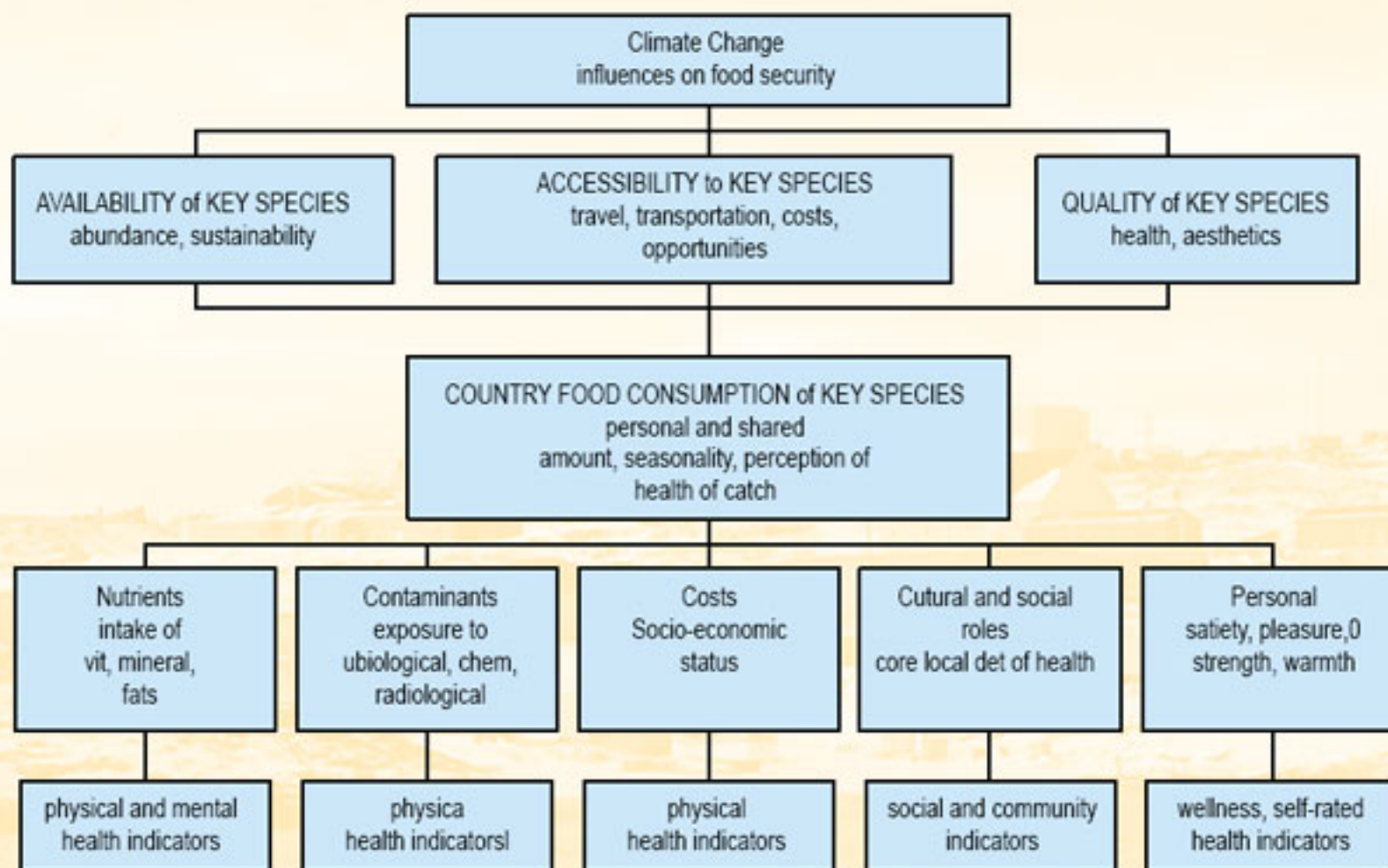
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Context and Conceptual Framework

Country foods are a critical resource to maintaining the health of Inuit populations. Country foods contribute to health in terms of nutrition (e.g. Blanchet, Dewailly et al. 2000), income and social status (Chabot 2004), social and cultural benefits (e.g. Freeman 1988; Borré 1994) and the Inuit concept of health (Shea 1990). Food security is a determinant of health which can be influenced by environmental and climate related changes that induce change in the availability, accessibility and quality of country foods (Duhaim 2002). This project is working with the hypothesis that changes in environmental conditions may influence a reduction in harvesting success which will challenge country food security for hunters and the members of their distribution network (i.e. family, friends and others) and subsequently has the potential to influence the health status of this population.

Figure 1: Climate Change and Food Security



IVUJIVIK



Purpose and Objectives

The qualitative component of this project seeks to identify the factors that are hindering or helping Inuit harvesters in their activities in order to better understand:

- the relative importance that environmental changes associated with climate change play in challenges to food security (e.g. effect of gas prices versus effect of shifted seasonality),
- the mechanisms through which environmental changes are helping or hindering harvesting and,
- current harvesting adaptation strategies to environmental change.



A quantitative component in this project, to follow, will conduct an analysis of the implications of the qualitative results (impact of various environmental factors on country food harvesting) on the intake of nutrients and exposure to contaminants under various future climate scenarios.

Methods

A group of approximately fifteen active harvesters representing a variety of practices and socio-economic profiles, will be "followed" over one year. Each Informant's harvesting experiences over an annual cycle will be documented via monthly interviews to develop a case history for each Informant. A baseline questionnaire will describe the Informant's habitual practices by season and species, and will collect baseline information on the participant's access to equipment, socio-economic profile, and distribution of harvested resources. Monthly semi-directive interviews undertaken either in the community or out on the land will document participants' experiences over the previous four weeks in terms of: environmental conditions, observations of change, factors contributing to harvesting success, failure or challenges faced. An exit interview will review core questions for the year prior as well as note changes to the Informant's socio-economic profile. Field work is being undertaken by a professional Inuit hunter and long time resident of Ivujivik who is being trained as a research assistant for this project.

Upon requesting permission of the community, Ivujivik was chosen for this study. A variety of species are actively harvested by the local population including Beluga whale, walrus, caribou, polar bear, a number of bird species and their eggs, and fish species and community residents have reported challenges in harvesting related to environmental changes in the recent past (Community of Ivujivik et al., 2005).

Thematic content analysis of interview data to identify key factors influencing harvesting success will address the three primary objectives of this study. As well, relationships to meteorological data in this region will be investigated (hunter perception vs. meteorological data). Results will be used to develop risk assessment scenarios for the community to determine a range of potential impacts of changes in the local environment on nutritional intake and contaminant exposure via alterations in availability, accessibility and quality of key country food species. Results will be disseminated first in the community in consultation with local officials and then to the larger regional, national and scientific communities.



Status of the Project

Field operation preparation and training has taken place in Ivujivik in September and November, 2005. Recruitment of Informants and collection of information for the first of the 12 months is now underway. Most interviews will be undertaken in Inuktitut and translated into English by the local research assistant. Iterative data analysis will begin in late spring 2006 as data is gathered and recorded. Analysis and initial reporting of this phase of the project to the community will take place during the winter / spring of 2006/07.

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