

Summary A1200: Adaptive Decision and Planning Tools (ADAPT) in Canadian Arctic Communities

Climate changes have the potential to redefine the context for arctic communities by influencing ecosystems, permafrost and hydrological patterns, and economic activities (ACIA, 2004; Gagnon and Gough, 2005). People already are forced to adjust their daily activities (such as hunting and travel) due to recent changes in sea ice and weather conditions. At the same time, however, dramatic changes are occurring in other dimensions: non-renewable resource development, globalization, government decentralization and evolving culture and values.

The ultimate aim of the research was to assist communities in adapting to a highly uncertain future resulting from the interaction of multiple forces of change. To achieve this purpose, we first had to understand community priorities and existing planning structures, and seek ways to incorporate longer-term adaptation into efforts to resolve their immediate needs.

Research with our partner communities revealed that the most pressing issues they face are shortfalls in employment, formal education, resources and housing. Evidence of social ills and cultural dislocation is pervasive. Communities wish to develop and improve the well-being of residents, while maintaining a strong relationship with the land and their traditional heritage. Dealing with impacts from nearby mines is their highest priority, eclipsing concerns for climate changes.

However, the capacity for the communities to strategically respond to concerns and address priorities is seriously hampered by several factors:

- Little control over priority issues;
- The need to deal with immediate crises that capture the attention and resources of individuals and the community as a whole;
- Very high turnover rates in municipal staff and Council, and lack of institutional memory;
- Deficiencies in financial and human resources in general, and in particular a lack of multi-year funding for programs and some positions;
- Insufficient information on community status and dynamics, and a lack of expertise and resources to collect data (both within the community and at the territorial government level); and,
- Adoption of “southern” planning models and plans that may be inconsistent with local culture and practice.

Tools for strategic planning and adaptation (e.g., trade-off analysis, risk assessment) might be designed for use in Nunavut communities. However, these will have only a limited effect until the fundamental challenges to planning listed above are addressed. Thus, the primary task of the project became building adaptive capacity (e.g., supporting data collection and monitoring, mobilizing information and resources toward planning processes, participating in decisions about resource development projects, etc.)

A parallel task involved gaining a deeper understanding of community dynamics through interviews, statistical data and historical study. This body of work allows the assessment of vulnerabilities and opportunities given plausible futures, and provides the community

with the basic information required to choose robust strategies for development that reduce risks and enhance potential benefits.