

## 2014 CCCR national summit case studies

### Nourishing Our Future: An adaptive food security strategy to ensure the cultural and physical well-being of the Kluane First Nations against the impacts of climate change in the Yukon

<b>Institution</b>	Arctic Institute of Community-Based Research
<b>Researchers</b>	Jody Butler Walker, Norma Kassi, Mallory Coletta, Chief Mathe'eya Alatini
<b>Location</b>	Yukon Territory: Burwash Landing, Destruction Bay, Silver City, Whitehorse
<b>Dates</b>	December 2013—August 2014
<b>Partners</b>	Kluane First Nation; Arctic Institute of CBR
<b>Funders</b>	Health Canada Climate Change and Health Adaptation Program for Northern First Nations and Inuit Communities
<b>Methods</b>	Interview, focus groups, qualitative analysis, videography

### Project background

The Kluane First Nation (KFN) government in Burwash Landing, Yukon is developing a community food security strategy with its citizens, focusing specifically on the citizens becoming more self-reliant in sourcing their food. In addition to investigating the use of new and modern food harvesting methods, KFN is also researching ways the community can return to eating more traditional foods and re-incorporate traditional food sharing practices into their lives.

Kluane First Nation is a small community of approximately one hundred people located in Burwash Landing, Yukon—278km West of Whitehorse. Historically, KFN people were hunters and gatherers, and up until the mid twentieth century, the majority of the community sustained themselves by living off the land. After the construction of the Alaska Highway in the late 1940s, the community began to incorporate more market foods into their diet as the city became more accessible by car. Today, with no local

store, Burwash citizens must drive to Whitehorse (556km round trip) to buy their groceries. Moreover, traditional foods, such as caribou, moose, salmon and trout are declining due to overharvesting, predator competition, and climate-related changes to the land. As a result of these issues, the KFN government has prioritized the development of a community food security strategy focused on maintaining their current traditional food sources, supporting local food production, making their community more food secure for the future.

The Arctic Institute of Community-Based Research (AICBR) was invited to implement the research project in partnership with KFN because of extensive experience in working with local communities in Yukon and in conducting community-based research.

### Research purpose

The overall objective of the project was for KFN to develop a community food security strategy with a focus on sustainability. This included education and raising awareness of the effects of climate change to the local environment and developing adaptive strategies as a response to these changes. Specific strategies included: determining the availability of traditional foods and taking action to maintain their long term availability; researching agricultural opportunities, such as animal husbandry; reintroducing ancient methods, such as food sharing; exploring possibilities of using geothermal technology to heat a greenhouse for growing food; and learning how to plan and manage a community garden.

### Research ethics

A full ethics review was conducted for this project by Health Canada's Ethics Review Board. The outcome of this review resulted in approval to proceed, through the issuance of a certificate. The activities resulting in achieving this certificate required AICBR and KFN to complete a sizable amount of work that was unanticipated and unaccounted for in the original budget, and was a learning opportunity for future partnerships.

AICBR led the work activities required for ethics approval, along with the KFN government, which included compiling and/or producing detailed information about all aspects of the project, such as developing and piloting project information for community members and the consent

## 2014 CCCR national summit case studies

forms for interviews and focus group participants (inclusive of photo release approvals).

Once these documents had been compiled and distributed to the Federal Ethics Review Board, the Executive Directors' of AICBR and KFN made a ten minute power point presentation about the project via conference call, and then responded to questions. At the end of the presentation we were asked to make a few revisions to the consent forms, which we did and re-submitted. Less than a month later, we received the approval certificate to proceed and did so.

### Research design and methodology

In 2012, AICBR, in collaboration with representatives from communities, government, non-government agencies, and academics working in northern community-based research, developed a list of principles and values that reflect the nature of community-based research (CBR) in Canada's north (AICBR, 2012). These principles, which are listed below, guided the research AICBR conducted with the KFN community.

Principles of community-based research (CBR) for the Yukon:

1. Community members and researchers work together in all stages of the projects.
2. Community members/research participants are actively involved in decisions about the research process from the beginning; and the process is responsive to cultural and community values.
3. The research process strives for consensus and enables participation for all people.
4. The relationship between researchers and community members is built on respect, trust, and learning with and from each other.
5. The research project lays the groundwork for the exchange of knowledge, skills, resources, and ownership between stakeholders and within a mutual agreement.
6. Those involved in the research project have the responsibility to provide reciprocity.
7. The research process builds the capacity of community people to participate in and use the knowledge produced by the research.

8. There is continuous discussion/verification of data between all partners in order to generate meaningful, useful, and accessible results to inform community actions.
9. The research benefits and serves the community directly and addresses their interests and needs.
10. Research builds on and contributes to the strengths and resources of the community.
11. Health is addressed from positive, ecological and cultural beliefs and values.

To facilitate an understanding of the relationships between the principles of community-based research and the following project activities, we have indicated relevant principles as they are developed within the case study.

#### The research team

Five people from AICBR and KFN made up the research team: a community principal investigator and a research assistant from AICBR; a community liaison and two local youth research assistants from the KFN community. In order to build capacity (CBR Yukon Principle 7), to ensure collaboration between the researchers and the community (CBR Yukon Principle 2), and to utilize the skills and assets already present in the community (CBR Yukon Principle 10), both the youth research assistants and community liaison were chosen because they live or have lived in Burwash Landing and have significant ties to the KFN community.

#### Team food security

To guide the project team in their work and ensure the research conducted was in line with the community's interests and needs (CBR Yukon Principles 1, 2, 4, 8, 10, 11), a local Advisory Committee called Team Food Security was formed. The community principle investigator and the KFN Executive Director collaboratively agreed on the membership of Team Food Security based on their local expertise. This expertise included knowledge of specific areas of KFN lands, gardening, harvesting, Elders, infrastructure and public works, regional food security, agriculture, and the KFN government.

Before beginning the research process, Team Food Security and KFN leadership advised the project team on whom to interview, who should participate in the focus group, and what questions were of particular

## 2014 CCCR national summit case studies

importance to ask. The project team also presented preliminary results to the advisory committee to ensure their interpretation was consistent with what the community said and intended (CBR Yukon Principle 2, 3, 4).

### **Kluane First Nation Chief and Council**

After the interview and focus group data were collected and analyzed, the community principle investigator and research assistant presented the preliminary results to the KFN Chief and Council for verification purposes.

### **Data collection and analysis**

The project team used qualitative research methodology to conduct the project, which was informed by maintaining frequent and ongoing communications with the community, the ongoing analysis of transcribed interview data and by attending and participating in community meetings and cultural events as subsequently described.

More specifically, data was collected through conducting a focus group and interviews with KFN citizens and other community members. In total, thirty-one people were interviewed and seven participated in a focus group, most of who were recommended by Team Food Security. The interview participants were chosen if they had experience or skills in growing, hunting, fishing, or harvesting, and/or had lived in the area for a long time. KFN Elders were also interviewed to capture their knowledge and learn about their experiences of living in the area when people still lived predominantly off the land.

Emergent methodology was used to analyze the transcripts and identify recurring themes in the data. To conduct this analysis, the research assistant was trained in NVivo 10 Qualitative Analysis Software. This software allowed the analysis of themes to be organized into categories called nodes, and sub-categories called sub-nodes (QSR International, 2014). These nodes and sub-nodes were translated in the themes. The community principal investigator also used her traditional knowledge and experience to interpret the data. Ultimately, it was the combination of these academic and indigenous approaches that informed the analysis (CBR Principle 11).

Following this initial analysis, the data was compiled and presented to the KFN Chief and Council and Team Food Security for verification. The

feedback received from these presentations was incorporated into the final analysis of the results (CBR Yukon Principles 3, 4, 8). Verification of the final results occurred with the community at the Annual General Assembly in July 2014 where further recommendations were provided.

### **Project-related community capacity building**

In order to encourage community involvement and ownership of the project (CBR Yukon Principles 5, 7, 10), the project team engaged community members in several capacity building activities. These activities are listed below.

Gave presentations to the Elders Council, Team Food Security, and the youth researchers on the topics of food security and climate change at the global, national and local levels.

Showed a video of a previous food security project AICBR conducted in another Yukon community to the Elders Council and the youth research assistants, and discussed the outcomes of that project.

Conducted a research-training workshop with the youth (a more detailed description of this workshop follows).

Invited two avid growers in the community and the youth research assistants to a community gardening workshop in Whitehorse, where they connected with other Yukon gardeners and gathered useful information on how to manage and sustain a community garden. The workshop was co-hosted by AICBR and the Yukon Government-Agriculture Branch.

Organized training in filmmaking for the youth research assistants and a third youth. The training included how to shoot, produce, and edit a film; the youth used this training to produce a DVD.

After the research was completed, the youth research assistants wrote summaries on what they learned from working on the project.

## 2014 CCCR national summit case studies

### Youth training workshop

To prepare the youth research assistants to help in conducting interviews and engaging their community in discussions, the community principal investigator and the research assistant developed a training package and PowerPoint presentation and conducted a two-day research workshop with the two youth (CBR Yukon Principles 7, 9). The first day included presentations and discussions on climate change and food security at the global, national, and local levels, providing the youth with a perspective of what is happening worldwide. On the second day, active listening and research skills were discussed and practiced; focusing on how to use probing questions and how to seek to understand what people are saying. Moreover, the youth were taught how to contribute their traditional knowledge to the project. This encouraged them to use a holistic way of thinking about how climate change is affecting their community and their own lives. From the training, the youth learned how to communicate in a language that demonstrated confidence as a researcher and respect for the interviewees (CBR Yukon Principles 2, 4, 5, 7, 10).

One of the youth research assistants was initially reluctant to be involved with the project, but after completing the training and learning more about food security and climate change, he became (and remained) enthusiastically involved.

"I was a little concerned about joining this workshop with this nourishing food project only because I was hesitant to participate. But now that I have a little more clarity about the purpose of this project, I'm glad that I'll have an opportunity to express my opinion about the project through my expertise in filming... It'll be stressful like most productions are, but at least I'm doing something for my community and my land in hopes that a very strong message will be sent," (Jared Dulac, Nourishing Our Future Community Newsletter Article, January 22nd, 2014).

Training continued throughout the project as the youth assisted in conducting interviews and learned how community-based research is done. They also helped with presenting the project at the KFN Spring Gathering and at the KFN General Assembly.

### Ongoing KFN community capacity building

The KFN government prioritizes community capacity building and has implemented several community projects and programs that facilitate skills development and promote community collaboration in relation to food security. AICBR participated in and supported these events throughout the research process, and engaged community members in discussions about the project at the same time.

### Lessons-learned

While executing the project several challenges emerged. Awareness of community politics and relationships were important when trying to ensure all voices were represented. Furthermore, representation from different families was found to be impacted by historical differences, which were important to consider in successfully conducting some of the interviews.

Not living directly in the community made it more obvious that we (AICBR) were outside researchers and felt more removed from the community itself. Our community liaison and youth research assistants were critical in breaking down these barriers to community access.

Given that there was not the capacity to house a local researcher, it was important that AICBR researchers had the flexibility to travel to the community on short notice. Logistically speaking this was challenging, as the commute was a 6 hour round trip.

## 2014 CCCR national summit case studies

### Domains of research excellence

The research project embodied all four of the domains of excellence: community relevance, equitable participation, action and change, and research design. It was through a focused attention on adherence to the Yukon principles of community-based research that the domains of excellence could be fulfilled.

Several strategies were employed to ensure the success of these domains. Capacity-building was a central component to this project; it was important to include youth in a meaningful way in the research process, as they are the leaders of tomorrow. As well, the principle investigator's traditional knowledge of First Nations and of indigenous culture was essential to surpass communication barriers and ensure cultural sensitivity throughout the research process.

Support from KFN leadership was also valuable. Throughout the project, it was very important that the Chief and Council, including staff, were readily available to help the project team in attaining interview participants and engaging focus group participants. In turn, a strong relationship between KFN and AICBR was fundamental to the success of the project; we were both able to contribute to and build on each other's capacities and skills throughout the research process.

In terms of space, we found that in order to encourage genuine participation, it was essential to hold interviews in a place where participants felt comfortable and empowered, such as in their homes or on the land.

### Community relevance

The idea for the project came from the community itself. KFN wrote the proposal for funding and intended to do the project themselves. After successfully receiving funding, KFN approached AICBR to collaborate on completing the project due to lack of research capacity within their community to undertake it on their own. The guidance received throughout the project from both KFN staff and Team Food Security, allowed for the community's priorities to be the focus of the research. The final results of the project were verified with KFN Chief and Council, Team

Food Security, and the community; this ensured the community's ideas and comments were fully represented.

#### Concrete examples of community relevance:

- Hiring and training research team members closely connected to the KFN community, including a community liaison and two youth research assistants
- Receiving guidance throughout the research project from KFN community members, inclusive of the proposal development process
- Forming a local Advisory Committee called Team Food Security
- Presenting the active research process and findings frequently to the KFN Elders, KFN Council, Team Food Security for verification

### Equitable participation

The project team strove to capture a broad representation of the community in the research. Approximately one third of the community was interviewed. The project team structure included representation from the community including youth, and the advisory committee, Team Food Security included an equitable representation of community members. Throughout the project, feedback was sought and incorporated through regular conversations with the community at various community events and visits.

#### Concrete examples of equitable participation:

- Consulting the KFN Elders, KFN Council, and Team Food Security for verification throughout the project
- Facilitating KFN community members to shape the research process, analysis, and dissemination through community events and presentations
- Involving youth research assistants throughout the research process, including knowledge dissemination

---

## 2014 CCCR national summit case studies

---

### Action and change

Multiple recommendations and action items came from the project. KFN will be acting on some of these project outcomes over the short and long term. However, particular instances throughout the research process demonstrate how this project has contributed to community action and change. An example of this is evidenced by one of the youth research assistants who was initially reluctant to be involved with the project, but after completing the training and learning more about food security and climate change, he became (and remained) enthusiastically involved. He has subsequently helped shape the theme of the DVD that is being produced as a part of the project.

#### Concrete examples of action and change:

- Assisting with the facilitation of a community gardening workshop in Whitehorse (co-hosted by AICBR and the Yukon Government-Agriculture Branch)
- Planning and conducting a training workshop for the youth research assistants to knowledge on climate change, food security, and community-based research. Youth research assistants also attended a film-making training
- Inviting reflection by the youth research assistants through written summaries on their knowledge gained from the project
- Presenting on the project at the KFN Spring Gathering and at the KFN General Assembly

As a result of their work on Team Food Security and other related initiatives, two women decided to work together to develop and plan a gardening program for the local daycare. Focus was directed towards training the youth on skills to grow food, in order to provide for the community in the future.

### Research design

As described in the previous section, the entire research process followed a community-based participatory approach and utilized local, indigenous, and academic knowledge both in conducting the research and in analyzing the findings.

#### Concrete examples of an excellent research design:

- Utilizing the local expertise of the advisory committee, Team Food Security, including the selection of interview participants
- Using of qualitative interviews and focus groups
- Combining of academic and indigenous approaches for qualitative analysis

### Additional aspect of research excellence

In addition to the four identified domains of excellence, AICBR also found that relationships of trust are an important aspect of CBR research excellence. The level of trust that existed between the First Nation community and AICBR was essential to the creation of the partnership that guided this research project.