

Inuit women and environmental change: examining experiences and adaptations in Iqaluit, Nunavut.

Overview

The following paper outlines my proposed Master's Thesis research which will focus on the ways in which Inuit women are experiencing and responding to climate change. In particular, a key research objective includes the documentation of adaptations and coping mechanisms that are being developed by Inuit women in reaction or in preparation to current changes in the environment. This work is grounded in a contextual approach to adaptation (O'Brian, 2007) Ford and Smit's vulnerability approach (2004) and the conceptual frameworks of Moser, Anderson and Woodrow (March and Smith 1999).

In order to adequately support adaptation policy and projects, data on how both men and women are adapting and interacting with climate change must first exist. Currently very little research exists globally on the issue of gender and climate change, and far less in an Inuit context. This thesis will aim to fill this gap.

This proposal touches upon the relevant climate change, gender, vulnerability and adaptation literature, which will provide the foundation for the research. The conceptual framework that will guide the work is outlined below and methodologies to be used described in depth. Finally a tentative timeline, budget and outline of thesis chapters conclude this research proposal.

Background

Climate change in the Canadian Arctic

The effects of climate change may not be immediately obvious in other communities in Canada, yet the Arctic continues to be the canary in the coal mine of climate change. Higher latitude regions are expected to experience climate change earlier and with greater intensity than other regions worldwide (Berkes and Jolly, 2001). It is perhaps unsurprising then that the Arctic is already experiencing changes which are impacting lifestyles and livelihoods (Berkes and Jolly, 2001). The 3rd Assessment of the IPCC (2001) outlines in detail the impacts the Arctic can expect to experience in the coming decades, some of which are already being experienced. Earlier sea ice break up and freeze up, a reduction in summer sea ice extent and changes to permafrost are already being experienced by Arctic communities. These climatic stressors are impacting traditional harvest

activities, such as hunting, and infrastructure (IPCC, 2001). Arctic hydrology is expected to change due to increased temperatures as are the biota and species composition (IPCC, 2001). Due to the uncertainty of future climate regimes the exact outcome of how climate change will impact the Arctic ecosystem is blurred. Although the exact biophysical outcomes may be somewhat unclear, it cannot be denied that the communities living within these regions will be impacted significantly. The IPCC (2001) notes that indigenous peoples relying on traditional lifestyles may be particularly disrupted by climate change as changes will impact traditional hunting and gathering and put pressure on traditional activities and ways of life. Without an adequate baseline understanding of how individuals experience climate change, both local and global policy will remain ineffective in responding to these changes. With this in mind, place-based case studies, where researchers work closely with stakeholders to define research questions, are necessary to understand the intricacies of climate changes impacts (Berkes and Jolly, 2001). Furthermore, these studies are critical to making progress on vulnerability reduction and adaptation (Berkes and Jolly, 2001).

Women and Climate Change Globally

In 2008, the UN's Commission Status of Women Council featured Gender and Climate Change as an emerging and important issue facing women (UN Commission on the Status of Women, 2008). Due to women's marginalized position in society, climate change is expected to result in climate change having a greater impact upon women, especially poor women (Lambrou and Piana, 2006; O'Neill et al., 2010). Globally, the adaptation experiences of marginalized sub-groups such as women, children and the elderly are lacking representation in climate change literature (Lambrou and Piana, 2006). Due to the additional societal and economic barriers these sub-groups face make the cultivation of adaptation and adaptive capacity more difficult (O'Neill et al., 2010).

Current literature focusing on women and climate change tends to categorize women as a vulnerable sub-population, particularly in the health fields (Arora-Jonsson, 2011). Despite the barriers they may face, women also have a great deal to offer climate change adaptation and vulnerability research, policy and practice (Carvajal-Escobar et al., 2008). Due to their distinctive roles in society, women have unique skills and knowledge that should be accounted for when determining adaptation priorities (Carvajal-Escobar et al., 2008). However, gender and climate change literature is still very limited (Carvajal-Escobar et al., 2008). Literature that does focus on gender within the context of vulnerability, climate change and adaptation, posits that the success of climate change research, policy and practice will depend on their ability to mainstream gender in a meaningful manner (Dankelman, 2002; Edvardsson Björnberg and Hansson. 2013; Lambrou and Piana, 2006; O'Neill et al., 2010).

From a systematic literature review I conducted on gender and climate change at a global scale, it is clear that very little meaningful gender work is being done in climate change literature. Gender and climate change work that currently exists is found most prominently in Australia and Bangladesh, two countries that, like the Arctic, are already experiencing the effects of climate change. Work in these regions tends to focus on gender beyond describing it as a factor that influences vulnerability. These studies have a greater tendency to describe a more holistic picture of the impact climate change has on women, describing mental health indicators, issues of governance, alternative understanding of risk, impact of climate change on relationships and the interaction climate change has with inequality and power. With this in mind, my research aims to fill some of these research gaps by focusing in on the way women in the Arctic are experiencing and responding to climate change.

Adaptation, Vulnerability and Climate Change

This research approaches adaptation and vulnerability from a social, not biophysical, standpoint (Ford and Smit, 2004). Adaptation is defined as adjustments made by human systems in response to immediate or anticipated climatic changes which either moderate harm or exploit opportunities (Berrang-Ford et al., 2011, IPCC, 2001). The word vulnerability is rooted in the Latin verb *vulnerare* meaning “to wound” resulting in the definition of vulnerability as one’s capacity to be wounded (Kelly and Adger, 2000). My research will take a contextual approach to vulnerability, rather than an outcome approach, defining vulnerability as the capacity to be wounded by the multidimensional interaction between social, economic and political spheres which impact one’s exposure, sensitivity and adaptive capacity (Ford and Smit, 2004, O’Brien et al., 2007).

This research also distinguishes between coping mechanisms and adaptations. As described in development and anthropology literature coping mechanisms are short-term responses to an abnormal experience in an attempt to stabilize livelihoods and lifestyles (Berkes and Jolly, 2001). Coping strategies tend to be done at an individual or household scale, while adaptation or adaptive strategies tend to emerge at a community or society level, with shifts in cultural values and rules to secure livelihoods under regimes of change (Berkes and Jolly, 2001).

Research Gaps

Although a growing body of literature on climate change and gender is developing, it remains focused on policy rather than specific case studies and is

critiqued as resting too heavily on generalizations (Demetriades and Esplen, 2008). Very little has been written on gender and climate change within a North American context and even less in relation to the Inuit. While a great deal of literature has focused on climate change experiences of Inuit communities and the impact of climate change on traditionally male dominated traditional activities (Ford et al., 2008; Ford et al., 2013), only two academic articles detail how Inuit women are experiencing climate change in Canada's North (Beaumeir and Ford, 2010; Dowsley et al., 2010). Beaumier and Ford's (2010) paper discusses how climate change impacts the food security of Inuit women in Igloodik, while Dowsley et al. (2010) focuses on climate change observations Inuit women are making and delves into the economic and political response of Inuit women to climatic change. Neither of these papers detail coping strategies or adaptations Inuit women have developed.

Though contemporary academic literature on this topic remains scarce, one community organization has recognized the importance of investigating the impact of climate change on Inuit women. In March of 2009 Pauktuutit, a non-governmental organization that acts as the national voice of Inuit women in Canada, held a meeting with women from all over Nunavut in Iqaluit to discuss how climate change was impacting the health of Inuit women (*Climate Change: Impacts on Women's Health*, 2009). Women described the impact climate change was having in terms of their mental health, access to nutritious traditional foods and the frequency of accidents while out on the land. This meeting called for more research regarding how climate change is interacting with the lifestyles, health and livelihoods of Inuit women.

Research Question and Objectives

Research Question

How are Inuit women experiencing climate change within the context of greater socio-economic change and what coping mechanisms and/or adaptations are they developing to adapt to these changes?

Objectives

This project's research objectives are fourfold:

1. Detail and categorize how women in Iqaluit are experiencing and interacting with climate change;
2. Document coping strategies and adaptations that Inuit women are developing;
3. Define factors which positively or negatively impact the adaptive capacity of Inuit women;

4. Discuss what Inuit women feel are appropriate adaptation priorities and methods for shifting coping mechanisms into adaptations to help address their changing environment and lifestyles.

This work will provide a baseline understanding of the issues faced by Inuit women from which social programming at both a community and government level can be developed.

Study Area



Map 1. Study Area (Source:

http://www.canadiangeographic.ca/magazine/jf09/feature_nvt_celebration.asp)

Iqaluit, located in the Qikiqtaaluk or Baffin region of Nunavut, will be the focus community of my research. As the territorial capital of Nunavut, Iqaluit is an anomalous community in terms of its size and diversity. With roughly 7,000 inhabitants and an ethnic make up of 65% Inuit and 35% Non Inuit, the community is much larger and ethnically diverse than communities found throughout the region and territory, which tend to have populations ranging from 100-800 people, of which 95% are Inuit (Ford et al., 2013, Statistics Canada, 2011). As the city is a large government center, much of the population is engaged in the wage economy to some extent.

While this research would be well suited to taking place in a smaller, more ethnically homogenous community, I have ultimately decided that I am best situated to conduct this research in Iqaluit. Any research which focuses on a topic as personal as gender must be rooted in trusting relationships. Having already spent a collective three and a half months over five trips in 2013 and 2014 in Iqaluit, I have built a strong foundation of relationships with a variety of community members. These relationships have not only given me significant insight into gender dynamics within the community already, but may help me access interviewees who are particularly well placed to help me answer my research questions. As the nature of my research is very personal and the methods I will be using are highly dependent on trust, working in a community where I already have significant connections with a wide variety of individuals will allow me to capture greater insight. My friendships and working relationships with community members, government workers and other researchers will provide a strong base on which to build this research.

Iqaluit also provides an interesting setting as its inhabitants come from diverse backgrounds and geographical locations, often moving to Iqaluit for economic or social reasons. Although unusual in its make up compared to other communities, Iqaluit may be indicative of the changes smaller communities in Nunavut will experience over the coming decades (J. Ford, personal communication, March 11 2014).

Conceptual Framework and Approach

This research takes a contextual approach to climate change adaptation and vulnerability as outlined by O'Brien et al. (2007). A contextual approach views change as occurring within political, institutional, economic and social contexts (O'Brien et al., 2007). This approach notes that exposures do not occur

in a vacuum but instead are experienced and responded to via social, economic and cultural structures. A strong understanding of the context of a region is necessary when taking a contextual approach, as there is a two-way interaction between exposure and social, economic and cultural structures. Understanding these reciprocal relationships allow for a deeper understanding of vulnerability and can provide a clear path for adaptation.

As my research question examines the ways in which climate change is impacting women, my conceptual framework is formed from two bodies of literature: climate change adaptation and vulnerability studies, and gender studies. My conceptual framework is centered on the Vulnerability Approach of Ford and Smit (2004), with the Moser Framework (1993) and the Capabilities and Vulnerabilities Framework of Anderson and Woodrow (1989). Together, these frameworks will help to contextualize the different factors that impact vulnerability. The Moser Framework is used to discuss the internal factors that impact a woman's vulnerability, while Anderson and Woodrow's framework provides a framework for examining any external factors that might impact vulnerability.

In light of the climate change adaptation and vulnerability focus of my research, Ford and Smit's (2004) Vulnerability Approach provides a suitable structure on which to base my research. This approach views vulnerability as a function of exposure and adaptive capacity, and uses these two concepts to assess both current and future vulnerability (Ford and Smit, 2004). Current vulnerability is assessed by documenting both the level of exposure of a system current climate as well as the current level of adaptive capacity to that change. Once current vulnerability is determined, future vulnerability can then be assessed. Through climate science research, future climate change exposure risks for a region are outlined allowing the researcher to assess how adaptive capacity may be able to handle these future risks. My research will use this vulnerability framework, aiming to improve academic knowledge of current adaptive strategies developed by Inuit women, while situating this knowledge within the larger vulnerability framework.

The gender focus of my research will be rooted in Caroline Moser's (1993) framework, which was developed to aid in transformative gender planning. Her framework accounts for women's triple role in reproductive work, productive work and community work while differentiating between practical and strategic gender needs. The concept of the "triple burden" is highly relevant to Inuit women. In terms of reproductive roles, Nunavut has a birthrate nearly twice that of the Canadian average and women enter the reproductive years of their lives earlier than in other Canadian provinces and territories (Statistics Canada, 2013). Inuit culture places great emphasis on mothering as part of female identity and in a reflection of this women are very engaged in the work of mothering and caring for

family members (Billson and Mancini, 2007). Inuit women are often the main income earners in their household, while still engaging in a high level of unpaid work and informal labour, such as traditional craft work (Billson and Mancini, 2007). In this way the productive role they play in their families is highly important. Finally, the community-based and kinship-oriented nature of Inuit culture is as important to women as they are to the community-based Inuit lifestyle (Billson and Mancini, 2007). The Moser Framework (1993) examines change through the lens of the triple role, assessing how change impacts each of these three internal aspects of women's lives. In this way it will provide categorical structure as I answer my research question.

Developed for a disaster hazards context, Anderson and Woodrow's Capabilities and Vulnerabilities framework is complimentary to Ford and Smit's (2004) Vulnerability Approach and an adapted version of this framework will be used to guide my research. As this framework comes from hazards literature, the terminology is the same as what is found in Adaptation and Vulnerability literature today. The framework outlines three different contexts or external factors that impact an individual's adaptive capacity and vulnerability (or by Anderson and Woodrow's original terminology, capabilities and vulnerabilities). The first is the social or organization context, which focuses on the ways in which social and organizational structures may be impacted by change. The motivational or attitudinal context take into consideration cultural or psychological aspects which may impact the ways in which community members view change and their ability to cope with these changes. Finally the material or physical context accounts for the distinct features of the climate, land, and environment where people live and the impact this has on their vulnerability to change and capacity to adapt to change. My research will use these three contexts to understand the external factors which may positively or negatively impact the adaptive capacity of Inuit women and their exposure to climate change.

An expanded version of the Capacities and Vulnerabilities analysis framework developed by Candida et al. (1999) altered this framework to make it more suitable for gender focused research and allow for comparison. Similarly to how Candida et al (1999) use the framework to disaggregate information by gender as well as socio-economic status, I will use the framework to compare experiences of different generations of Inuit women.

Methods and Project Design

Research which deals with such personal experiences will only be successful if community-based and participatory in nature and this project's methodology aims to reflect that. As Inuit culture is based in an oral story-telling tradition I will be using semi-structured interviews, informal discussions, participant

observation, small focus groups, and photovoice as my data collection methods. Photovoice will be used as an interview tool to encourage longer-term reflection on environmental change and its impacts.

Semi-structured interviews

The majority of my research data collection will come from semi-structured interviews, informal discussions and participant observation. Starting with conversational interviews, which will take place in either English or Inuktitut based on the participant's preference, I will ask questions surrounding the environmental changes individual women are experiencing and what strategies they use to handle these changes. I will encourage the participants to reflect upon the way previous generations (mothers, aunts, and grandmothers) may have handled these changes. The participants will be asked to describe how change is impacting them both positively and negatively and what they feel they need to be able to best integrate change into their lives.

Informal discussions and participant observation will also be key aspects of this research. As gender is a performance, much can be learned simply from observation about the ways in which one's gender interacts with one's environment (Butler, 1999). Informal discussions will also likely provide insight into environmental changes impact on one's gender.

Photovoice

As part of my research I will be using the Photovoice method, which asks participants to take photographs to address a specific research question. Participants meet with the researcher to discuss these photos and the meanings behind the images. As this method is highly visual, it lends itself well to visual forms of results sharing which I will make use of in my community results sharing at the end of the data gathering period

Interested interviewees will be invited to participate in the Photovoice portion of the research. Participants will be provided with a question regarding how environmental change is impacting them and be asked to take photographs over a series of months in response to this question. In an effort to create interest and foster creativity with the method a two-hour workshop will be hosted for Photovoice participants. This workshop, led by a local professional photographer, will give the women a chance to get comfortable with the cameras, play around with different forms of photo composition and allow us to discuss the method in further detail. Participants will then be invited to spend the next three months using the camera and taking photographs, uploading photos at regular predetermined intervals. In September of 2014 I will return to Iqaluit to discuss

the photos which each participant and host a focus group with all the photographers to discuss themes that emerged from the photography. Given the preference for consensus decision-making in Inuit culture, the combination of focus groups and individual interviews will hopefully provide insight into both collective and individual experiences. An exhibit of the photographs will be held for the public if participants wish to showcase their work, providing a venue for preliminary results showing.

Results sharing

As this work is community-based research, results communication at the community level is a top priority. If the Photovoice participants agree to showcase their work in a community setting, I will coordinate a community photo exhibit, pairing photos with quotes the participants have consented to share publically. This work will allow participants an opportunity to share their own creative work and hopefully facilitate community discussion around the issues at hand. Should a photo exhibit not be of interest to the research participants, a community event would be held instead. This community event would involve creating a game out of sharing the results, making the results dissemination interactive.

I also plan to develop an interactive web-based map of Iqaluit that will have each of the pictures located on them to allow community members, and those outside of the community, a chance to view the photos online within their geographic context. By creating this online platform I aim to encourage ongoing discussion of the issues raised particularly among youth who may be less likely to attend the community photo exhibit. In order to do this I will need to buy digital cameras that are embedded with GPS. As such, this element of the research design is funding dependent. Should funding for GPS cameras, be unavailable, participants will simply be asked to point out on a map where each photo was taken.

Depending on what community and government collaborators determine would be useful for their organizations, a targeted dissemination document will be created using plain language to distil the most useful findings of my research in a usable manner. What form this dissemination document will take will be very dependent on which organization is most interested in collaborating.

For the academic community, I plan to give a presentation on my research findings at ArcticNet 2014 in Ottawa. Upon completion of my thesis, I will publish at least one academic article detailing my key findings. I see adding to the academic literature as an important part of my research given the current literature gap surrounding Inuit women and climate change and women and climate change globally.

Expected Findings and Contributions

Based on the minimal literature that currently exists on this topic I expect to find increased levels of stress among Inuit women and unique impacts to traditional lifestyles and life ways as a result of climate change. In a video of Pauktuutit's (2009) meetings on climate change and health, women clearly expressed how climate change was impacting their mental health. Due to unreliable weather patterns, traditional knowledge is not as reliable as it once was, putting women and their families at greater risk of accident. Along with this increased risk to physical safety, women also described feeling great anxiety and stress when their partners, children and other loved ones are out on the land since traditional knowledge is not as reliable as it once was. Women also spoke about the limited access to country food due to increased hunting costs and faltering sharing networks, which places stress on food security. Being unable to access these highly nutritious and culturally preferred foods were associated with physical as well as mental discomfort.

Martha Dowsley's (2010) paper described the way climate change was impacting traditional lifestyles and life ways. Women stated that caribou and other animals seemed to be in poorer health than they were decades ago, citing animal's thin skin as evidence, something which was also mentioned in the video produced by Pauktuutit (2009). Dowsley's paper noted that berry picking seasons were changing due to new variations in the climate. I aim to build on these findings and describe the ways in which women are adapting and coping with these changes.

Given that climate change is a relatively recent phenomenon, I expect to see a greater prevalence of coping strategies, that is short-term ad hoc strategies, rather than longer-term adaptations. Due to the socio-economic climate in Iqaluit, I anticipate that the coping strategies and adaptations that are most developed will be those which impact daily necessities, such as food acquisition or income generation.

I expect to find that Inuit women are developing creative methods of coping with environmental change within the realm of greater socio-economic change the region is experiencing. Given the changes to the socio-economic system experienced by Inuit over the last 100 years, and their long history of adapting to a harsh climate, adaptation is not unfamiliar to Inuit.

Although I plan to document ways in which climate change is being experienced, the main contribution of this research to the adaptation literature will be to detail the ways in which Inuit women are adapting to and coping with the impacts of climate change.

Collaboration

Academic Collaboration

This research will be conducted under the umbrella of the Indigenous Health Adaptation to Climate Change (IHACC) research project. A five-year project, IHACC aims to study how the health of Indigenous communities in the Canadian Arctic, Peru and Uganda are being impacted by climate change (IHACC, 2014). My research project is well aligned with the first objective of IHACC, which is to characterize current vulnerability within study regions (IHACC, 2014). This research will help identify whether or not Inuit women are experiencing climate change vulnerability and what they are doing to address this vulnerability. As discussed above, mental health indicators, such stress, may be a finding of this research, and therefore contribute to the health aspect of IHACC.

My research will also be informed by the Indigenous Knowledge Adaptation (IK-ADAPT) research project, although it is not formally connected to IK-ADAPT. IK-ADAPT is a community-based project that aims to combine indigenous knowledge and scientific research to inform policy needed to help communities adapt to climate change. This is being achieved through the preservation, promotion and dissemination of indigenous knowledge. Although my research is not formally a part of the IK-ADAPT project, attending IK-ADAPT meetings and discussions with researchers working on this project have and will continue to inform my research.

Community Based Collaborations

I hope to find a community or government organization to collaborate with in a meaningful way. A main goal of this research is to create usable science, however this necessitates a strong connection with an organization that may be able to make use of the research (Dilling and Lemos, 2011). Pauktuutit would be an ideal collaborative partner, given their past work that looks at the ways in which Inuit women's health is impacted by climate change (Pauktuutit, 2009). Due to Pauktuutit's Annual General Meeting held in April they were unable to commit to any collaboration. Conversations in regard to collaboration with them are currently ongoing.

Timeline

Month	Progress
May	Field work preparation
June	1 st portion of field research (interviews)

	and transcription
July	Transcription and early analysis
August	Transcription and analysis
September	2 nd portion of field research (photovoice) and analysis
October	Finishing analysis beginning to write
Novemeber	Writing
December	Writing and attend ArcticNet Conference
January	Writing
February	Writing
March	Draft finished
April	Research dissemination results sharing
May	Final draft completed

Budget

Item	Cost	Details
Flight	\$5000	Based on current prices for First Air and Air Canada flights for two trips
Accommodation	\$850	Based on Q Unit pricing from 2013 for 1 month stay and a two week trip
Food	\$700	Cost for food for one month long trip and one two week trip
Transport	\$250	Cost for taxi to and from airport and taxi's in and around Iqaluit
Compensation	\$1000	Compensation based on \$50 per interview for 20 interviews
Consecutive Translation	\$500	Based on \$25 an hour rate at 20 hours of work
Photography workshop	\$100	Based on quoted cost from Baffin Photography for 2 hour photography session
Photo printing costs	\$100	Photos will need to blown up and framed for exhibit
Results dissemination costs	\$1000	Considering cost of printing and translating information shared
Total	\$9,500	

Tentative Chapter Outline for Thesis

Introduction:

- Justification of topic's importance
- Overview of following chapters

Chapter 1: Review of the Literature

- Literature review of gender literature, climate change vulnerability and adaptation literature, and gender and climate change scholarship

Chapter 2: Methods and Conceptual Framework

- Introduction of conceptual framework
- Explanation of how interviews, focus groups and photovoice were carried out in practice

Chapter 3: Results

- Analyze interviews and photovoice pictures and focus groups
- Identify coping mechanisms and/or any adaptations being developed

Chapter 4: Discussion

- Contrast adaptations and coping strategies that Inuit women are developing/have developed today to those developed by previous generations
- Discuss the adaptation strategies identified and prioritized by women interviewed.
- Situate the climate change experience of Inuit within broader gender frameworks (Moser's and Anderson and Woodrow's gender analysis frameworks)

Chapter 5: Conclusion

- Situate contributions of findings within existing literature
- Suggest future research directions

References

- IHACC. (2014). Retrieved from <http://ihacc.ca/about>
- Adger, W. N. (2006). Vulnerability. *Global Environmental Change*, 16(3), 268–281.
doi:10.1016/j.gloenvcha.2006.02.006
- Arora-Jonsson, S. (2011). Virtue and vulnerability: Discourses on women, gender and climate change. *Global Environmental Change*, 21(2), 744–751.
doi:10.1016/j.gloenvcha.2011.01.005
- Beaumier, M., & Ford, J. D. (2010). Food Insecurity among Inuit Women Exacerbated by Socio-Economic Stresses and Climate Change. *Can J Public Health*, 101(3), 196–201.
- Berkes, F., & Jolly, D. (2001). Adapting to Climate Change: Social-Ecological Resilience in a Canadian Western Arctic Community. *Conservation Ecology*, 5(2). Retrieved from <http://www.ecologyandsociety.org/vol5/iss2/art18/>
- Berrang-Ford, L., Ford, J. D., & Paterson, J. (2011). Are we adapting to climate change? *Global Environmental Change*, 21(1), 25–33.
- Billson, J. M., & Mancini, K. (2007). *Inuit Women: Their Powerful Spirit in a Century of Change*. Rowman & Littlefield.
- Butler, J. (1999). *Gender Trouble: Tenth Anniversary Edition*. Routledge.

- Candida, M., Ines, S., & Maitrayee, M. (1999). A Guide to Gender-Analysis Frameworks. Oxfam. Retrieved from <http://www.ndi.org/files/Guide%20to%20Gender%20Analysis%20Frameworks.pdf>
- Climate Change: Impacts on Inuit Women's Health*. (2009). Retrieved from http://www.youtube.com/watch?v=lzpW6mYoJiw&feature=youtube_gdata_player
- Dankelman, I. (2002a). Climate change: Learning from gender analysis and women's experiences of organising for sustainable development. *Gender & Development*, 10(2), 21–29. doi:10.1080/13552070215899
- Dankelman, I. (2002b). Climate change: Learning from gender analysis and women's experiences of organising for sustainable development. *Gender & Development*, 10(2), 21–29. doi:10.1080/13552070215899
- Denton, F. (2002). Climate change vulnerability, impacts, and adaptation: Why does gender matter? *Gender & Development*, 10(2), 10–20. doi:10.1080/13552070215903
- Dilling, L., & Lemos, M. C. (2011). Creating usable science: Opportunities and constraints for climate knowledge use and their implications for science policy. *Global Environmental Change*, 21(2), 680–689. doi:10.1016/j.gloenvcha.2010.11.006
- Dowsley, M., Gearheard, S., Johnson, N., & Inksetter, J. (2010). Should we turn the tent? Inuit women and climate change. *Études/Inuit/Studies*, 34(1), 151. doi:10.7202/045409ar

- Edvardsson Björnberg, K., & Hansson, S. O. (2013a). Gendering local climate adaptation. *Local Environment*, *18*(2), 217–232.
doi:10.1080/13549839.2012.729571
- Edvardsson Björnberg, K., & Hansson, S. O. (2013b). Gendering local climate adaptation. *Local Environment*, *18*(2), 217–232.
doi:10.1080/13549839.2012.729571
- Ford, J. D., McDowell, G., Shirley, J., Pitre, M., Siewierski, R., Gough, W., ... Statham, S. (2013). The Dynamic Multiscale Nature of Climate Change Vulnerability: An Inuit Harvesting Example. *Annals of the Association of American Geographers*, *103*(5), 1193–1211. doi:10.1080/00045608.2013.776880
- Ford, J. D., & Smit, B. (2004). A Framework for Assessing the Vulnerability of Communities in the Canadian Arctic to Risks Associated with Climate Change. *Arctic*, *57*(4), 389–400.
- Gender perspectives on climate change. (2008). In *Emerging issues, trends and new approaches to issues affecting the situation of women or equality between women and men*. UN Commission on the Status of Women. Retrieved from <http://www.un.org/womenwatch/daw/csw/csw52/issuespapers/Gender%20and%20climate%20change%20paper%20final.pdf>
- Government of Canada, S. C. (2013a, March 19). Births and total fertility rate, by province and territory (Fertility rate). Retrieved April 16, 2014, from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/hlth85b-eng.htm>

- Government of Canada, S. C. (2013b, May 8). 2011 National Household Survey Profile - Census subdivision. Retrieved April 17, 2014, from <http://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=6204003&Data=Count&SearchText=iqaluit&SearchType=Begin&SearchPR=01&A1=Aboriginal%20peoples&B1=All&Custom=&TABID=1>
- Kelly, P. M., & Adger, W. N. (2000). Theory and Practice in Assessing Vulnerability to Climate Change and Facilitating Adaptation. *Climatic Change*, 47(4), 325–352. doi:10.1023/A:1005627828199
- Lambrou, Y., & Piana, G. (2006). *Gender: The Missing Component of the Response to Climate Change*. FAO. Retrieved from <http://www.eldis.org/vfile/upload/1/document/0708/DOC21057.pdf>
- Moser, C. (n.d.). *Gender Planning and Development: Theory, Practice and Training*.
- O'Brien, K., Eriksen, S., Nygaard, L. P., & Schjolden, A. (2007). Why different interpretations of vulnerability matter in climate change discourses. *Climate Policy*, 7(1), 73–88. doi:10.1080/14693062.2007.9685639
- O'Neill, S. J., Hulme, M., Turnpenny, J., & Screen, J. A. (2010). Disciplines, Geography, and Gender in the Framing of Climate Change. *Bulletin of the American Meteorological Society*, 91(8), 997–1002. doi:10.1175/2010BAMS2973.1