The Power of Participatory Dialogue: Why Talking About Climate Change Matters

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Introduction

Climate change is one of the most important contemporary issues and it has become the routine focus of meetings, workshops, and conferences. This paper is about a transboundary dialogue on climate change and water in the Great Lakes Basin of North America. The event is unique because it brought Indigenous and non-Indigenous people together to engage in a participatory dialogue to explore the vulnerability and adaptive capacity of Indigenous peoples. Months after the event, the participants were contacted to see if they were interested in collaborating further on a reflective paper. The individuals who expressed an interest in doing so thus embarked on an exciting journey that resulted in this paper. It is structured into the following three sections: the first section conveys background information on the issue, the second section succinctly describes the approach taken, and the final section shares some of the insights the authors' gained upon reflection.

Background information

The Great Lakes Basin is the largest freshwater lake system in the world. Management of resources within the Basin is complex because of the multiple jurisdictions involved. While several initiatives have developed to address some of the environmental issues in the Great Lakes Basin, the adequacy of meaningful involvement and acknowledgement of Indigenous Peoples' rights is contested.

Climate change is, and will continue to, impact the Great Lakes Basin. While forecasting the impacts of climate change is not perfect, several comprehensive studies have been undertaken to better understand the potential impacts of climate change on the Great Lakes Basin. Some of the major predicted changes relating to water may include: an increase in annual precipitation, intensification of extreme events, a reduction in snow cover, a reduction or elimination of ice cover, and a reduction in net basin supplies (Mortsch et al., 2003).

While these impacts will affect all 33 million people who live within the Basin, the Indigenous Peoples (and their approximately 100 communities) will be uniquely affected. The vulnerability and sensitivity of Indigenous communities to the impacts on water and associated ecosystems from climate change are amplified because of their exposure, sensitivity, and capability to influence change. Problems with clean and reliable drinking water are persistent in Canadian Indigenous communities and will worsen with climate change (Centre for Indigenous Environmental Resources, 2008). Subsistence activities closely connected to the environment means that the impacts will be immediate and directly affect their livelihoods. Other systemic factors such as poverty, disadvantaged positioning and marginalization

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have limited Indigenous Peoples' input to decision making processes concerning the environment and resources (Mascarenhas, 2007).

Water is a central feature of many Indigenous cultures. Indigenous Peoples of North America have adapted to change throughout history and since European settlement have responded to pronounced environmental shifts and cultural pressures. Indigenous Peoples are resilient. Traditional knowledge and culture are important factors in their capability for adaptation. The close relationship to the environment makes adaptation strategies an important concern for Indigenous Peoples within the Great Lakes Basin.

Methods and processes

While a lot of attention has focused on climate change and Indigenous Peoples in the North, relatively little work has concentrated on the issue south of 60th parallel. Therefore, a consortium of partners came together to plan and support *A Transboundary Dialogue on Climate Change and Water in the Great Lakes Basin: Exploring the Vulnerability and Adaptive Capacity of Aboriginal Peoples*. The organizers and partners at the outset agreed that: the event must include individuals from throughout the Great Lakes Basin; it had to involve both western and traditional knowledge and perspectives; and it needed to emphasize dialogue and interaction.

Indigenous and non-Indigenous Peoples with an interest in climate change and water within the Great Lakes Basin were invited to participate. The Symposium was held on March 27th, 2009 at Six Nations Polytechnic in Ohsweken, Ontario, Canada. Fifty individuals attended the Symposium. Attendees had diverse backgrounds and included practitioners, community members, academics, graduate students and representatives from government agencies. A primer document was prepared and circulated in advance to provide a basis for discussions. The Symposium had three main parts. Invited speakers first set the context for the Symposium by presenting information on Indigenous perspectives on water, the context and impacts of climate change in the Great Lakes Basin, and transboundary waters and adaptation strategies.

Participants then dispersed into three smaller groups. The backgrounds and perspectives held by individuals in each group purposefully reflected the diversity of the attendees. The small group discussions were facilitated by a member of Six Nations of the Grand River and graduate students. Note takers were present in each group to assist with capturing information and subsequently reporting back to the group. The facilitators introduced themselves and explained the purpose of the dialogue was to talk about experiences with water and the impacts of climate change, vulnerabilities and capabilities for adaptation (see Photo 1). The facilitators then engaged individuals in a round of introductory remarks, at which time most people shared their names, affiliation and/or the community in which they reside.

Photo 1: A sharing circle at the Symposium (Photo by Zubair Khan)

The discussions unfolded differently in each of the small groups. The dialogue in one of the groups was initially tentative. The rigid nature of the discussion persisted for some time, despite the facilitator further clarifying the subject of the discussion and trying to engage individuals through probing

questions. About half way through the dialogue session, when the individuals became more comfortable with each other, the rigidity seemed to dissipate. In another group, the individuals moved immediately (during the introductions) into listing issues associated with climate change, water and Indigenous communities. The guiding questions provided to help discussion seemed to be a hindrance for this group and by 'not following' them a broad-ranging and fruitful dialogue took place. The third group found it useful to 'reword' the focusing question concerning vulnerability, so it was more specific to Indigenous communities in the Great Lakes Basin in reference to the impacts they identified.

As an outcome of these dialogue sessions, each of the small groups generated an extensive amount of information pertaining to: the impacts of climate change on water the individuals are currently experiencing and observing, impacts that are anticipated in the future, vulnerabilities related to these impacts, and capacities to respond to these challenges. A compendium of information emerging from the dialogue sessions is available in the Symposium report (see Plummer et al., 2009). In the following section of this paper we highlight the main lessons we learned from both the small group sessions and the entire Symposium.

The third part of the Symposium focused on how to move forward with adaptation strategies and opened with Lisa Hardess sharing some of her experiences in working for the Centre for Indigenous Environmental Resources (CIER), which is a Canadian First Nation directed environmental non-profit organization. She emphasized the close connection between adaptation and the promotion of sustainability in daily life. Visualizing these linkages was facilitated by a graphic of the 'four key pillars of sustainability in Aboriginal communities - environment, culture, economy and society.

In the final dialogue the participants shared examples of adaptation strategies and ways to collectively move forward. The formation of an entity to address environmental issues, often by pooling resources, was identified as common approach. The Haudenosaunee Environmental Task Force and Akwesasne Environmental Task Force were given as specific examples. General consensus emerged in the final session about short and long term actions. It was agreed that after the Symposium: a network of individuals and organizations with shared interests in these issues should be built; a document containing the information gained at the Symposium should be circulated; and, options in how to share information should be explored.

Lessons Learned, Critical Reflections and Analysis

We each thought about what we learned from the Symposium, the strengths and weaknesses of the process we employed and experienced, and the ideas for ways forward. These questions give structure to this section of the paper.

What did we learn from the Symposium?

The Symposium served as a vehicle for personal discovery and gaining knowledge on a diversity of topics. As an academic interested in traditional knowledge, I found it intriguing that although there has been little formal or systematic research conducted on the impacts of climate change on Indigenous Peoples in the Great Lakes Basin, there appears to be a wealth of traditional knowledge on the topic. The knowledge contained in communities needs to inform and address the complex topic of climate change and water. As an Indigenous person and consultant, it was very beneficial to learn more about

the science of climate change forecasting and the potential impacts of climate change on the Great Lakes. The Symposium also afforded a valuable chance for me to forge contacts with other Indigenous peoples in Canada and the US who are interested in these issues.

Coming to the Symposium as a research scientist working for a government agency, I became acutely aware that the non Indigenous participants were very comfortable focusing just on the concept of water, while many of the Indigenous participants were not. It was difficult and inconsistent with a holistic perspective to "unbundle" the concept of water from the other aspects of the environment. I also was struck by the immense benefits of incorporating the wisdom brought to the issue by Elders, youth and women. As an academic engaging in research with Indigenous communities, the Symposium reinforced for me the uniqueness of each culture and community as well as the extent to which 'one size fits all' policies and approaches are misguided. For example, observed changes in ice conditions around Georgina Islands have caused alterations to transportation policies that would have little relevance in other communities.

As an academic and Indigenous person, a primary concern I share with the Indigenous participants at the Symposium is how Indigenous cultures will be affected by climate change. One wonders whether traditional knowledge based on the unique lived experience of Indigenous People, while it has endured for thousands of years and has much to offer in understanding climate change, could possibly become knowledge of an environment that no longer exists. Fortunately, however, traditional knowledge is a living system; it grows and develops over time as Indigenous People interact with their changing environment. This direct environmental experience (see Box 1 for an example) perhaps offers the best opportunity for learning about and adapting to climate change. In my view the contribution of traditional knowledge to the adaptive capacity of Indigenous Peoples facing challenges relating to climate change is where future research must lie. This type of research is currently underway by First Nations, through the Chiefs of Ontario to explore the role traditional knowledge can play in environmental governance in the Great Lakes Ecosystem. It is anticipated this research will influence Canada/United States negotiations on amending the Great Lake Water Quality Agreement to consider traditional knowledge.

Making syrup from the sap of maple trees is a traditional activity. Examining the impacts of climate change on making maple syrup is an important research question currently being investigated by Deborah McGregor. Her family's maple syrup camp on the north shores of Lake Huron is one site for her research. The beauty of this type of traditional knowledge research lies in the involvement of her whole family in an intergenerational way. Impacts on the maple sugar camp relating to climate change include invasive species (insects that damage/destroy maple trees). Variable weather patterns and widely fluctuating temperature has created spring conditions that make it difficult to "know" when to begin tapping the trees (and when to stop).

As an Indigenous person as well as an environmental and aboriginal law and policy consultant, I recognize that the integration of Indigenous knowledge requires the participation of Indigenous Peoples in decision making. For indigenous knowledge to be taken seriously and actually integrated in law and policy, Indigenous governments must be legitimately recognized and participants in the policy process;



Box 1. Climate change and the making of maple syrup

this requires a commitment to reconciliation, extended dialogue and consultation, free, prior, and informed consent of Indigenous Peoples to new policy, projects or legislation, and accommodation of Indigenous rights and interests. Indigenous rights are currently being undermined by the failure to address the climate change impacts on the Great Lakes and by the failure of the federal, provincial and state governments to include Indigenous Peoples meaningfully in the policy dialogue.

In being both a graduate student studying social and ecological systems and an Indigenous person aware of traditional teachings, the Symposium reinforces that we need to take responsibility for our actions, look to future generations when making decisions and always have respect for one another and Mother Earth (see Box 2). By building relationships we can work as partners to develop initiatives that are good for us and the natural world.

Eagle feathers are a significant symbol in numerous Indigenous cultures in North America. For many, they represent knowledge, honour, wisdom and respect. This piece of art depicts teachings of how our past, present and future are connected to each other, and how we are holistic and inherently a part of the natural system. For many Indigenous People it is a place of subsistence, natural beauty and a foundation of existence itself. For thousands of years the environment has offered its resources for the taking without refuting. However, the world today shows impacts from our choices of the past. This has inevitably led to numerous present vulnerabilities, affecting Indigenous People across North America. Consequently, it has become increasingly important to address such concerns. We must understand how our past is connected to our present and shapes our future; how we are a part of a natural system, not a part from it; and, how what we do today will affect seven generations to come. Only when we learn this will we be able to utilize this knowledge to adapt, and plan ahead so that this world may offer meanings and resources for future generations to come.



Box 2. Our Past, Present and Future by Jodi Johnston

What worked well and what improvements could be made?

In critically reflecting upon the Symposium it is evident that some key aspects stand out as being particularly favorable. Foremost is an emphasis on dialogue. As an academic and co-chair of the Symposium, I quickly realized just how 'sick and tired' individuals are of sitting and listening to 'experts'. Informal feedback and discussions at breaks made clear that providing opportunities for all participants to speak and engage with others in a meaningful way was a welcomed change.

As an academic and Indigenous person, I think the dialogue-based approach is a powerful mechanism for sharing different perspectives and points of view. In creating a forum that privileges neither western scientific nor traditional knowledge there is an opportunity to dissolve the entrenchment that sometimes accompanies these positions. While the resilience and evolving nature of traditional knowledge was a central focus of the small group discussion I participated in, Indigenous participants also recognized the value of science in contributing to the understanding of climate change. The tools of western science need to work in tandem with traditional knowledge. Beyond providing current "on the ground" observations, traditional knowledge's oral histories also contribute important historical baselines which can help delineate environmental changes over time. This is one of the advantages of traditional knowledge: an oral record exists from long before written "records" were kept of climate data (e.g., precipitation levels, weather patterns, temperature fluctuations, etc.). Traditional knowledge working in conjunction with western knowledge could offer a powerful set of knowledge and tools with which to assess impacts and develop adaptive strategies. This collaborative approach was utilized with the EAGLE project (Effects on Aboriginals of the Great Lakes Environment), with a research team comprised of scientists, First Nations environmental practitioners and Elders. Traditional knowledge drove the research questions and informed the research process.

Looking back, there are also a few specific things that could also be strengthened. As an academic and co-chair of the event, I believed we carefully thought about how to create a non-hierarchical forum, including the provision of materials in advance, the structure of the sessions, and facilitation techniques. As alluded to in the description of the small group dialogue sessions, it became very clear that asking preconceived questions concerning vulnerabilities and adaptive capacities is inappropriate. Individuals need to frame these questions themselves, and once that occurred, the small group discussions proceeded.

Additional time that was unstructured and permitted opportunities for relationship building and networking would have been useful to many of the participants. The 'buzz' during the breaks and lunch as well as the evening gathering signaled the high productivity of this time. As a research scientist and government agency employee, I am inspired by the breadth and depth of information generated at the Symposium. One of the major challenges I see is how best to synthesize this diversity of information so as to best reflect the nature of the dialogue.

How do we move forward?

The Symposium brought together participants who have never dialogued before and maintaining momentum from it will require consistent effort and the establishment of ongoing opportunities is an important next step. This includes sharing adaptation success stories from communities, both within the Great Lakes Basin and beyond, and between Indigenous and other communities. Indigenous communities are not often presented with such opportunities, nor do their members frequently publish their insights, so there are significant gaps in the available knowledge. It is imperative to include a variety of means of sharing information, such as expressed through the spoken word or art (see Picture 2).

As an immediate follow-up to the Symposium, and with specific reference to the requirements in the paragraph above, we compiled and circulated a Symposium report (Plummer et al., 2009), prepared an information brief titled 'Climate Change and Water – Finding Pathways for Adaptation and Resilience', and created electronic portal called The Indigenous Adaptation Network an (www.indigenousadaptationnetwork.com). portal This allows individuals concerned about environmental change, adaptation and Indigenous Peoples to connect, share information in several formats (e.g., stories, art, etc) and further dialogue.

As authors of this paper, we all believe that building relationships and collaborative undertakings among Indigenous, academic, government and other entities is important. Organization of the Symposium is a great example of what is possible with such collaboration. Relationships initiated and/or strengthened by the Symposium continue to develop and have contributed to subsequent initiatives. For example, the Six Nations Eco-centre is collaborating with the Adaptation and Impacts Research Section of Environment Canada by monitoring rainfall and contributing to the Canadian Drought Alert and Monitoring Program. A larger consortium of partners (Indigenous, academic, government) are engaging together in a multi-year research project regarding source waters, vulnerabilities, and building capacities for environmental governance. The Symposium permitted linkages to be established between research projects. For example, lines of communication and reciprocal feedback are occurring between the aforementioned initiative and another research project on traditional knowledge. A First Nation-academic research collaboration has been initiated to identify ways traditional knowledge can form a key part of the water governance.

At the same time, we recognize that relationships take a long time to develop and that more linkages need to be developed. For example, the Women's Water Commission of the Anishinabek Nation was established in 2007 specifically to share knowledge regarding water, and could provide insight into this discussion. We also acknowledge the existing institutional arrangements and governance structures within the Great Lakes Basin, both formal and informal, that shape the realm of adaptive options. Specific policies and agreements to address water and ecosystem issues in the Great Lakes Basin (e.g., Canada-United States Great Lakes Water Quality Agreement, the Great Lakes Charter Annex) were identified in the background document and the contested nature of some of these by Indigenous Peoples was recognized. While some individuals who work for governments were invited to and participated in the Symposium, critiquing past and present policies and agreements was not the focus. However, these larger international institutional structures need to be acknowledged and we need to continue to pressure governments to engage the Indigenous community in climate change decision making and to recognize the rights of Indigenous peoples, including rights to self-determination and self-government. Other international institutions and initiatives provide positive advancements. For example, the United Nations Permanent Forum on Indigenous Issues acknowledges the connections among climate change, biological diversity and cultural diversity. Mechanism such as the proposed International Regime on Access and Benefit- sharing under the Convention on Biological Diversity raise the prospect for respect and benefits to Indigenous peoples for their contributions.

Conclusion

We believe there are two main messages to take away from the Symposium. First, the people who are directly affected by climate change on a daily basis must be actively involved with the issue of climate change. The participation of Indigenous People in climate change adaptation decision making and implementation is critical. Traditional knowledge offers holistic, ecosystem specific and multi-generational insights. Working in conjunction with western knowledge, a powerful synergy can be realized to assess impacts and develop adaptive strategies. Community based research that involves Indigenous people is the most appropriate approach for exploring this work.

Second, the format of the Symposium generated excitement and created a space conducive to meaningful dialogue. This approach encouraged participants to build upon each other's knowledge and experiences and encouraged pathways for further collaboration. In my closing remarks (as the manager of an Indigenous environmental organization and co-chair of the Symposium), I indicated that "I would like to think that a larger event of several days would be a possible next step". My reflections reinforce the importance of having such an event in the future.

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