

Climate Change Planning Tools for First Nations

Using Indigenous and Western Knowledge for Community-Based Adaptation to Climate Change

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Abstract

This case study identifies a community-based planning framework used to develop climate change planning tools for First Nations. The participatory development framework is a community-based collaborative process that relies on the active participation of community members to carry out planning initiatives. The framework is an innovative approach that challenges conventional planning theory and practice, leading to a paradigm shift in community-based planning for Aboriginal communities. As Sandercock points out, “if the voices and desires of indigenous peoples are to be respected, acknowledged, and to count for something... a certain amount of rethinking is necessary within the planning profession” (2004, p. 119). The first part of the case study explores the ‘lessons learned’ aspects of using the participatory development framework process. Next, the study turns to the ‘looking ahead’ section in which the focus is on future planning initiatives for Aboriginal and non-Aboriginal communities. Finally, the case study concludes by briefly suggesting how planners could work towards alternatives to ‘mainstream’ planning, and create practices that may be more appropriate when working with Aboriginal communities (i.e. First Nations, Métis and Inuit) and Indigenous communities worldwide.

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Background & context

Conventional planning practices do not translate easily to a First Nations setting and have proved to be disempowering to Aboriginal communities (see, e.g. Harris, 2002; Peters, 2005; Robertson, 1999; Sandercock, 2004). Careful consideration of methods and process is therefore important when working cross-culturally. Thus, our focus is to give attention to how planners can work with

Table of Contents

Abstract
page 1

Background & Context
page 1

Facts of the Case
page 2

Developing
the Guidebooks:
First Nation
planning tools
page 4

Lessons
Learned:
Towards a new
planning paradigm
page 5

Looking Ahead:
Future planning
initiatives for
First Nations and non-Aboriginal
communities
page 8

Aboriginal communities in a more culturally appropriate and participatory manner to develop integrated community sustainability plans (ICSPs). By definition, ICSPs differ from conventional planning by engaging the community in the planning process through collaborative participation. For these reasons, planning for Aboriginal communities should incorporate Aboriginal worldviews into a planning process that may be more appropriate than conventional planning methods.

Appropriate planning practices should recognize the diversity among Canada's Aboriginal peoples. This diversity reflects the relationship that Aboriginal peoples experience with the environment and how they continue to rely on the environment for economic and cultural success. When nuanced to the particular needs and cultural sensitivities of Aboriginal communities appropriate planning practices are more effective, since they are relevant to culture and place. To encourage community participation in the planning process, planning practices should be collaboratively developed in the in the community through participatory techniques that involve and engage participation in the design, delivery and implementation. As is implied in the name ICSPs, the approach is holistic in its engagement with the socio-economic life of the community, and the natural system upon which the community depends. In particular, the focus is on the cultural, social, economic and environmental health of a community.

In the study, we draw on the use of the participatory development framework – the method used to develop the Guidebooks – to illustrate the importance of collaborative planning through participatory techniques. This method includes building relationships of trust with community members, community based research and the active participation of the community in the development and testing of the Guidebooks, and experiential learning by all parties, in this case the local knowledge used to develop strategies to address climate change as well as the knowledge CIER gained from the project. Diagram 1, *Participatory Development Framework*, illustrates this process.

Facts of the case

The case study documents a recent initiative to develop First Nations planning tools for climate change by the Centre for Indigenous Environmental Resources (CIER) in partnership with Sioux Valley Dakota Nation in Manitoba, and the Deschambault Lake Community, Peter Ballantyne



Diagram 1: Participatory Development Framework

Cree Nation in Saskatchewan. The 18-month project included two three to five day visits to each First Nation from 2005-2006.

CIER is a non-profit First Nation directed environmental organization that carries out research, education, and training in the area of sustainability, water, forests, and climate change. It has worked on climate change initiatives in the past, but recognizes the need for specific climate change planning tools for First Nations to address adaptation to vulnerabilities to community sustainability.

CIER approached these First Nations as partners because of their specific and related experiences. Deschambault Lake community has participated in climate change research; Sioux Valley has worked on developing their community plan. Both First Nations have experienced the impacts of climate change and are aware of the need to plan to manage or adapt to its impacts. Both have also been involved in various planning initiatives in the past, and recognize the need for comprehensive community planning involving planning for cultural, social, economic and environmental aspects of their community.

Climate change and community planning are increasingly important to Aboriginal communities. Scientific evidence suggests that climate change will effect Aboriginal and northern people more severely than anywhere else in Canada, and this raises concerns as they continue to rely on the environment for economic and cultural success (Berkes, 1999; Duerden, 2004). Yet planning to adapt to the impacts of climate change at the community level, where it is needed most, has not occurred; in most communities in Canada talk of planning for adaptation is only just beginning.

Climate change planning tools for First Nations explores the development of a new innovative paradigm - an innovative approach to integrated sustainable community planning, in which First Nations plan, create and implement a community based planning process. Its success lies in its ability to adapt to the user, rather than taking the approach of 'one-size fits-all'. Most importantly, the adaptive approach serves as an effective tool for creating a collaborative decision-making framework.



The effects of climate change are increasingly impacting the sustainability of the planet. A common concern among members of both First Nations was that the winters were shorter and it was harder to predict the weather, unlike before.

A key element in developing the tools for adapting to climate change was relying on the Indigenous knowledge of the Elders, who had experience and strategies for coping with change.

Developing the Guidebooks: First Nation planning tools

The focus of the Guidebooks is on this planning process, rather than specific climate change scenarios and or decisions. The intent was to create user-friendly planning tools, which First Nations can use to plan for the sustainability of their communities in the face of climate change. The Guidebooks are available via CIER's website (<http://www.cier.ca>).

CIER partnered with two First Nations to develop the Guidebooks; however, the reach of the product is broader via its distribution among Aboriginal communities and interested non-Aboriginal communities. The tool is divided into six Guidebooks, each one focusing on a different step in the process. This allows users to enter the tool at different steps, based on need. If, for example, a community has begun the planning process, then they can easily jump ahead to the next Guidebook. Otherwise, the Guidebooks follow a logical process. They include:

- Starting the Planning Process
- Climate Change Impacts in the Community
- Vulnerability and Community Sustainability
- Identifying Solutions
- Taking Adaptive Action
- Monitoring Progress and Change

Designed as a set of user-friendly and culturally appropriate climate change and adaptation Guidebooks, the tool guides a First Nation through planning to identify, avoid, minimize or adapt to the impacts of climate change. Each one is a stand-alone document and can be adapted to suit the needs of all Aboriginal communities and could be used with non-Aboriginal communities and adapted to local needs. The tool includes planning strategies and exercises to engage a wide variety of community members in the planning process to identify climate change impacts, vulnerabilities, solutions and actions for adaptation. While these strategies and exercises are described in detail and somewhat prescriptively, the user is encouraged to adapt them to best meet local needs; examples of how the partner First Nations applied these planning initiatives provides real-world examples as well as their local adaptation of the process, where this occurred.



The Vice Chief fills out a survey.

During the process of development, draft Guidebooks were on display at the local Band Office for community members to look at. For those unable to attend the planned workshops, the local liaison person was available to discuss the Guidebooks and receive feedback. CIER also asked community members to fill out a survey on peoples' observations of climate change and their planning priorities in their First Nation.

Lessons learned: Towards a new Aboriginal planning paradigm

The decision to approach the development of the climate change planning tools through partnership, collaboration and the use of participatory methods was deliberate and intended to create an opportunity for empowerment for the two First Nations. External actors, such as planners, can not empower others as this driving force comes from within; they can, however, create situations that foster empowerment and where people feel safe and supported in their decisions.

The participatory development framework facilitates self-empowerment and helps Aboriginal communities recognize their own strengths and opportunities to take the lead role in planning. By contrast, the inability of state planning processes to understand, respect, and respond to distinct Indigenous needs, has excluded Aboriginal peoples from the planning process. The challenge for the planner is creating an environment that is inclusive and fosters the development of community-based planning. We draw on the experiences of this study as 'lessons learned' to suggest how planners might create this environment. While doing so, we draw on current developments in planning theory to illustrate the relevance of a participatory process to the practice of planning.

Using imagery from planning theorist, John Friedmann, our intent is to inform 'best practices' by building on new theories of "transformative planning" (Friedmann, 1987). Planning that is transformative is 'emancipatory' (Friedmann, 1987, p. 389-412) in its potential to transform the structural dimensions of oppression that occur from systematic constraints of state planning to adequately address the needs of Aboriginals. These are the institutions, policies and laws of the dominant state, which inhibit Aboriginal peoples ability to develop and exercise their capacities and express their needs, thoughts, and feelings.

If, however, planners are to engage Aboriginal communities in a meaningful way, build capacity, and create space for Indigenous planning in the planning world, a certain amount of rethinking is necessary. As Sandercock (2004) points out, it is time that planners challenge 'mainstream' planning, heed the voices of 'others', and incorporate 'other ways of knowing' (i.e., Indigenous epistemologies) into the planning sphere. As Aboriginal



CIER held workshops with children to teach them about climate change and asked them about what they noticed about the changing climate. The children also shared what they 'love about' their First Nation which can help identify community values and planning priorities.

The participatory development framework includes engaging children in the planning process. Children are the future of tomorrow and will be the leaders and stewards of the environment; their inclusion and participation is important.

communities begin to use planning to achieve their goals, they must gain the ability to work with and within state-based planning structures. Non-Aboriginal planners with knowledge of conventional planning structures may help in this regard by assisting Aboriginal communities to operate in this environment, while also working to transform this environment in way that would, for example, recognize Indigenous knowledge, rights, and so forth.

Recently, Lane and Hibbard (2005) explored how Indigenous communities in the US, Canada and New Zealand use the operational lens of planning to regain control over their lands and resources. Rather than trying to regulate this emerging process, as the state often does, planners should engage Indigenous communities in planning initiatives to ensure safeguards and protection are in place for Indigenous rights and community sustainability while encouraging participation to lead the planning process. Planners can be agents of change, rather than agents of control by creating culturally appropriate methods that are equitable and foster transformative change.

The Guidebooks help to create an environment that gives value to Indigenous knowledge, recognizes First Nations' ability to plan, and engages Aboriginal communities in the planning process. Without the use of the participatory development framework, this environment would not exist. These lessons, along with others that follow, illustrate the importance of a using a participatory process to engage communities in planning. The participatory process may also inform 'best practices' in conventional planning as suggested in the final part of this study.

One of the most important lesson learned in creating the Guidebooks was the realization that the two First Nation partners use planning—albeit in different ways—to transform the circumstances they find oppressive or restrictive. Unconsciously they were engaged in the planning process and CIER simply pointed out their ability, built on their skill-set, and continued to develop community-based planning using their knowledge and experience.

Realizing the innate ability First Nations have to plan became clearer in the piloting of the Guidebooks. Unlike a traditional pilot the content and activities developed at CIER were later enhanced and fleshed out in the two First Nation communities using their knowledge of planning and of what was appropriate and most likely to succeed in the community. Community participation in the review and



CIER staff (foreground) with Band Councillors from Sioux Valley Dakota Nation reviewing the Guidebooks.

Meeting with Chief and Council and obtaining approval on community planning projects is important. It helps to develop a better working relationship with decision makers, and gives authority to the project, especially if a Band Council Resolution is required to proceed.

However, planning decisions must be community-based and not rest with Chief and Council alone. This ensures that key planning decisions remain intact, even if a new Chief and Council is elected.

editing of the Guidebooks provided for a more meaningful product that was more relevant to the First Nations. For example, language and explanations that seemed clear as planners was at times confusing for community members. Community consultation, therefore, helped create terminology that was more relevant to culture, context and place. While many Aboriginal people may not speak their native language, cultural values remains alive and reflect a worldview found in their native language (Kovach 2005). This understanding helped create relevant, user-friendly tools that are useful.

The lesson in building a relationship based on trust with the two First Nations was highly valuable. From the beginning of the project, CIER worked with a community liaison person, who participated as a key member of the project team, and created connections with community members more easily and in appropriate situations. Community liaison people worked in their First Nations to initiate conversations about the project, planning, and climate change with the leadership and arranged meetings and activities with Elders, school principals, teachers, and students, resource users, and other community members. Using a participatory development framework paved the way for a positive first impression with the community liaison people, who then further facilitated a positive first impression for the project and CIER among community participants.

Achieving consistency among members of the community involved in the planning process was another important lesson learned. Knowing that people are involved for different reasons, have different agendas, and different levels of commitment reflects a community's diversity. Respecting this diversity is important and those wishing to collaborate should do so comfortably. However, the level of collaboration and the time spent building relationships usually depends on project timelines and budget. Nevertheless, if done correctly it can still be meaningful and effective in a short period. In any event, community planning should include members from all sectors of the community and key stakeholder groups affected by planning decisions. In the case of the Guidebooks, the participatory process included Elders, hunters and trappers, women, youth, children, and Chief and Council. Accepting that everyone has different levels of commitment was an important part of the success of the Guidebooks, as methods were adapted to suit the needs of various stakeholders. The result was the development of a truly unique relationship with the two First Nations, and ultimately led to the creation of community-based product.



CIER staff poses for a photo with a community liaison person (centre). The community liaison was essential in helping to build relationships with the First Nations and involve members of their First Nation in the planning process.

Looking Ahead: Future planning initiatives for Aboriginal and Non-Aboriginal communities

In 2005, the Federal government signed the New Deal for Cities and Communities to achieve “real, measurable progress toward the economic, social, environmental and cultural sustainability of Canada’s cities and communities” (Canada, 2005, p. 4). This initiative, which includes First Nations, promoted the development of integrated community sustainability plans (ICSPs) as the tool for achieving community sustainability. The purpose of ICSPs is to “accelerate the shift in local planning and decision-making toward a more *long-term, coherent and participatory approach to achieve sustainable communities* (emphasis original) (Canada, 2005, p. 4). The literature on developing ICSPs reveals a multitude of planning frameworks that can be used as the basis for developing an ICSP (see American Planning Association, the Canadian Institute Planners, the International Council for Local Environmental Initiatives, etc.). If a framework is to be successful, however, it must ensure a high level of community engagement and opportunity for community feedback. If not, the process and eventually the plans, insofar as they are developed, will not gain acceptance in the community.

Similar to the ICSP promoted in the ‘New Deal’, the Guidebook’s participatory development framework is holistic in its approach and embraces the integrated nature of community sustainability (i.e., economic, social, environmental and cultural sustainability). However, the unique approach of the participatory development framework with its emphasis on developing capacity within the community that is appropriate, respects culture and tradition, and uses Indigenous knowledge, fosters an intimate planning process that can inform ‘best practices’. Looking ahead to future planning initiatives, as cities and communities move towards integrated and collaborative planning more broadly, the type of transformative planning presented in this study can yield lessons for ‘mainstream’ planning. The participatory development framework is an innovative way to ensure greater transparency over the planning process as it places control in the hands of the community.

Future initiatives that use the participatory development framework include CIER’s partnership with First Nations to help them develop comprehensive community plans.



A staff member from CIER discusses the Guidebooks with a local Elder. Indigenous knowledge is a valuable source of information for a community engaging in planning for climate change.

Similar to an ICSP, comprehensive community planning is a tool for long-term, collaborative decision-making, to achieve sustainable communities. This initiative uses the participatory development framework and, as explained in this study, the success of comprehensive plans depends on how it is relevant to culture, context and place. Without this focus, it will not gain acceptance in the community nor reach its objective of achieving community sustainability.

The focus on the participatory development framework has potential to contribute to dialogue on how planning can better represent and address the needs of its constituency. The art of community planning is evolving rapidly, and as communities become more involved in planning and planners actively listen to their constituents, new methods and 'best practices' will evolve.

Photos courtesy of CIER

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