

# *Understanding the Role of the Boreal Environment in Supporting the Well-Being of Remote First Nations Communities in Canada*

**Briefing Note of IISD's Natural and Social Capital Program and the IISD Foresight Group**

## *Why are Environment and Well-Being Linkages Important?*

Policy-makers understand that the environment plays an important role in supporting the livelihoods and well-being of Canada's remote First Nations communities. It is the details of the relationship between the environment and well-being that are less understood, yet critical for effective planning and policy-making in support of Canada's remote areas. The key question is: *what is the full range of products, services and benefits that are derived from the local boreal environment in remote communities, and how does this support the health and security of its citizens, their livelihoods and social relations?*

A body of literature has emerged over the past decade that is helping to clarify the linkages between environment and human well-being, for example, the work of the Millennium Ecosystem Assessment undertaken in 2002 and the ongoing work of the United Nations Environment Programme and their Global Environment Outlook process. However, the current discourse is characterized by complicated terminology and relationships, making it difficult to use pragmatically in planning and policy discussions. This literature is also predominantly international, with limited discussion in the context of Canada's remote First Nations communities.

### **GLOBAL ISSUES APPLYING LOCAL PRESSURES**

The World Economic Forum describes the "water-food-energy" nexus as: "A rapidly rising global population and growing prosperity are putting unsustainable pressures on resources. Demand for water, food and energy is expected to rise by 30-50% in the next two decades, while economic disparities incentivize short-term responses in production and consumption that undermine long-term sustainability. Shortages could cause social and political instability, geopolitical conflict and irreparable environmental damage. Any strategy that focuses on one part of the water-food-energy nexus without considering its interconnections risks serious unintended consequences."

Source: World Economic Forum (2011). Global Risks 2011 (6th Ed.). Retrieved from <http://riskreport.weforum.org>

## *Understanding the Linkages—Clearly!*

IISD collaborated with two remote First Nations Communities in Manitoba to advance an assessment framework for better understanding the role of the environment in supporting community well-being. The framework is intended as a tool to assist federal, provincial and First Nations governments in place-based planning efforts towards sustainable development.

The environment and community well-being assessment framework was crafted (Figure 1) with a foundation in the international discourse (i.e., most notably, the Millennium Ecosystem Assessment), and grounded and simplified through insights gathered in two sharing circle focus groups convened in Bloodvein and Poplar River First Nations. The assessment framework shown in Figure 1 categorizes the role of the environment according to: (i) products for living; (ii) services for sustaining; and (iii) cultural and spiritual benefits. Specific elements under these three categories are then related to three categories of community well-being, namely: (i) health and security; (ii) livelihoods; and (iii) social relations.

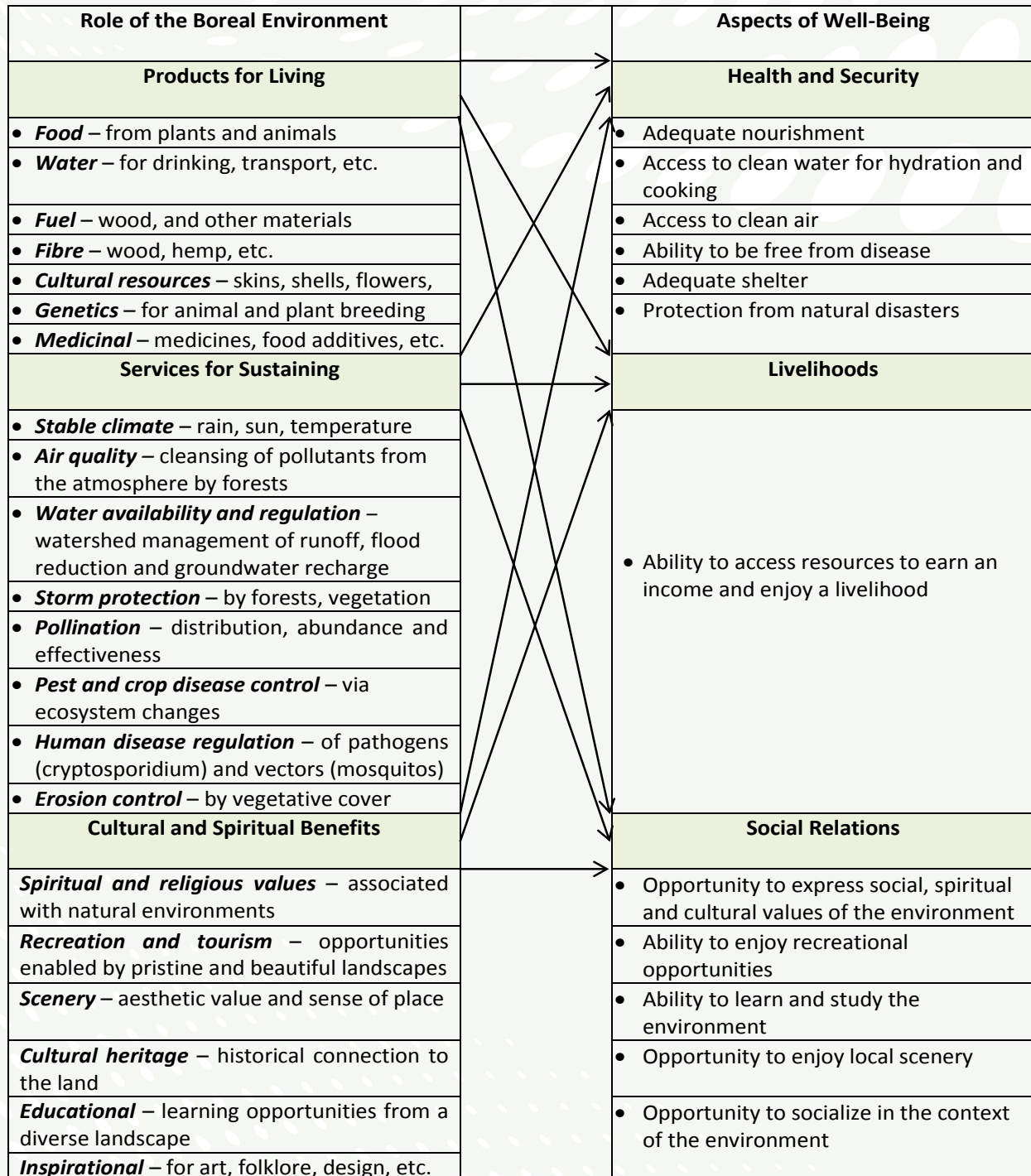
The sharing circles demonstrated the general applicability of the Millennium Ecosystem Assessment framework and provided guidance for simplifying the categories and terminology. Several insights were gathered during the community sharing circles, including:

**Products for Living.** The narratives from the sharing circle emphasized that the environment provides many products necessary for living: *“Many of us still live off the land. If we couldn’t, we couldn’t live here.”* Those key products obtained from the environment include traditional foods such as caribou, duck and rabbit meat, berries and mushrooms. People in the community obtain additional income from fur-bearing animals, which, in some cases, were used for traditional crafts or sold for pelts. The issue of access to traditional foods was an important part of the sharing circle narrative. Community members mentioned that an increasing number of people are not going the long distances they once would have gone to access animals, plants and berries. The majority of hunting and gathering is now conducted in the immediate vicinity of the community, which over-stresses the local environment, making it much less productive.

**Services for Sustaining.** Community members spoke of vital services provided by the environment for sustaining their existence, for example, muskeg (peatlands) serving as a natural water filter. The recharge and productivity of the muskeg has changed over the recent years, lessening the availability of this naturally filtered water. The rapids in the area now provide the only clean water for the people, the rivers and lakes no longer do. During the hot summer days that have been occurring more frequently, the water in these areas drops, limiting community access to clean water. Community members also noted that trees surrounding the community provided important protection to houses during wind storms and against increasing erosion around the roads and rivers. As a last example, the sharing circle revealed the crucial role that a stable climate plays with respect to predictable ice conditions: *“Without the winter road, we wouldn’t be able to afford our current diet [...] when it closes, it affects everyone both financially and psychologically.”*

**Cultural and Spiritual Benefits.** Traditionally, people derived significant cultural and spiritual benefits when obtaining products from the environment, but a number of factors have limited the ability of knowledge to be passed from elders to youth thereby limiting the youths’ ability to derive benefits from the environment: *“We are losing connections with traditions; we are not using the plants that we used to.”* Additionally, the aesthetic value of the local environment has also been very important in providing the opportunity to enjoy local scenery: *“Now there is garbage everywhere and I have to live in that garbage.”*

**FIGURE 1. ASSESSMENT FRAMEWORK FOR UNDERSTANDING THE ROLE OF THE ENVIRONMENT IN SUPPORTING COMMUNITY WELL-BEING**



Source: Adapted from Millennium Ecosystem Assessment (2003). *Ecosystems and human well-being: A framework for assessment*. Washington, D.C.: Island Press.

## *Strengthening Assessment and Planning*

### **CLIMATE CHANGE AND CANADA'S REMOTE COMMUNITIES**

The World Economic Forum and the United Nations have upgraded their concern for the coming risks of water-food-energy security because of potential climate change impacts. The evidence from Canada's remote communities supports this concern. Global climate change is bringing with it the prospect of an ice-free Arctic passage and the potential of increased natural resource development. Indeed, remote communities are already seeing less reliable winter ice roads, creating a desire for more permanent road systems through the boreal to mitigate the risk of food and energy supply disruption. Global issues are quickly translating into local natural resource pressures. It is imperative for sustainable development that our understanding of the role the environment plays in supporting the well-being of remote communities keeps pace with these pressures, and that we put this understanding into practice.

The environment and community well-being assessment framework presented in this policy brief provides a simple and pragmatic means for better understanding how the boreal environment can support community well-being. There are several salient planning settings in which this assessment framework can contribute to the realization of critical sustainable development outcomes. Among these are:

- Natural resource development plans and investment decisions (i.e., oil and gas, mining, forestry)
- Northern development strategies at First Nations, provincial and federal levels
- Community and regional development plans
- Climate change adaptation planning—community and sector-based
- National and provincial park designations and UNESCO World Heritage Site bids

With a potential future scenario of intensified development in Canada's North, it becomes paramount that our federal, provincial and local planning and policy-making efforts aimed at leveraging future opportunities and mitigating key risks are informed by a comprehensive understanding of how the environment supports community well-being in remote settings.

---

## *Acknowledgements*

IISD wishes to thank the communities of Poplar River and Bloodvein First Nations for their interest in and contribution to this initiative. In particular, we acknowledge Melba Green and Ray Rabliauskas for their efforts in convening the sharing circles. The sharing circles were facilitated by Christa Rust, Livia Bizikova and Charles Thrift of IISD's Natural and Social Capital Program. IISD would like to thank StewardEdge Inc. for their financial support of this initiative and their keen interest toward a better understanding of the role the environment has in advancing human well-being.

## About the Researchers and Funder

### **Researcher and Facilitator: The International Institute for Sustainable Development (IISD)**

Website: [www.iisd.ca](http://www.iisd.ca)

IISD contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change and energy, measurement and assessment, and natural resources management, and the enabling role of communication technologies in these areas. We report on international negotiations and disseminate knowledge gained through collaborative projects, resulting in more rigorous research, capacity building in developing countries, better networks spanning the North and the South, and better global connections among researchers, practitioners, citizens and policy-makers.

IISD's vision is better living for all-sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC), and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.

IISD's new Natural and Social Capital Program is about people, places and planning for sustainability, and its innovative IISD Foresight Group researches, develops and applies integrated and forward-looking assessment tools and processes for local, regional and sector-based planning.

#### Head Office

161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada R3B 0Y4

Tel: +1 (204) 958-7700 | Fax: +1 (204) 958-7710 | Web site: [www.iisd.org](http://www.iisd.org)

### **Funder: StewardEdge Inc.**

Website: [www.stewardedge.ca](http://www.stewardedge.ca)

As a leading consulting and management company in Canada, StewardEdge Inc. is focused on managing consumer product company risks related to their post-consumer products and packaging and helping them to improve their environmental, economic and social performance, bringing decades of experience from across North America and internationally. For over 30 years, StewardEdge Inc. has gone where no one has gone before, accomplishing numerous industry firsts and continues to forge ahead, innovate and lead the way boldly into the future.

## For More Information

For more information please contact:

Darren Swanson

Deputy Director, Natural and Social Capital Program

Program Leader - IISD Foresight Group

International Institute for Sustainable Development

Email: [dswanson@iisd.ca](mailto:dswanson@iisd.ca)