

POLICY BRIEFING - ENVIRONMENT

Putting people in environmental picture

We're redefining the environment as an integrated space defined by both human and non-human forces.

By CHAD GAFFIELD



At the heart of the current environmental debate is the changing relationship between people and the rest of the biosphere. Until recently, the dominant cultures of the western world assumed that we could increasingly "master" nature. By developing technologies to control and exploit the organic and inorganic environment, our ancestors imagined a future with the potential for unlimited production and consumption.

Now, however, we are redefining the environment as an integrated space defined by both human and non-human forces. In other words, we are realizing that we will only be able to control our destiny to the extent that

we act with respect for the character and power of the natural world.

For this reason, researchers began focusing on the human dimension of environmental change. Their work is helping us, the public and policy-makers, gain a better understanding of the complex economic, social, cultural and political forces that shape—and are shaped by—global environmental changes. As a result, we are starting to develop a new relationship with the rest of the biosphere, and thereby significantly enhancing our prospects for the 21st century.

In Canada, the Social Sciences and Humanities Research Council (SSHRC) is building a research foundation for environmental understanding and policy in the context of Canada's science and technology strategy. This research on people complements the study of the physical and biological processes involved in

environmental changes, and contributes to new policies and practices for environmental adaptation and sustainability.

SSHRC's focus can be summed up in one word: people. We seek to build understandings of people and to develop the talent required for Canada to succeed in the competitive global economy of our era. Our research emphasizes the importance of policies and behaviours for achieving environmental sustainability.

Canada's successful adaptation to environmental change depends upon our ability to meet the social, cultural, economic and political challenges that are the preoccupation of the social sciences and humanities.

As recently reported in *Research Money*, SSHRC is a major contributor to environmental research, with \$15.7-million awarded to researchers in 2005-06, a 142 per cent

increase since the beginning of the decade. Most of that funding (\$9.6-million) went to projects directly related to sustainability. Funding for research on behavioural adjustment to climate change reached nearly \$2.7-million, while other environmental projects focused on the human dimensions of forestry and silviculture (\$2.5-million) and energy and natural resources (\$896,000).

SSHRC often works in partnership to support research on sustainability, climate change, energy and natural resources—especially involving the North, Aboriginal Peoples, and management of the oceans and coasts. For example, BIOCAP, funded by SSHRC and an array of government and corporate donors, is an important private-public sector initiative on managing greenhouse gas emissions. Another major initiative is the Ocean Management Research Network, jointly funded by SSHRC and the Department of Fisheries and Oceans.

This research shows that environmental sustainability is only possible through major changes in human activity. Canadian society is increasingly challenged to adopt new energy sources such as biofuels, to change the practices of existing industries such as forestry, agricultural and resource extraction, and to engage citizens as well as governments in critical decisions about resources such as oceans and freshwater. Public infrastructure will be under growing stress from the effects of climatic changes. In each of these areas, sound evidence and in-depth understanding of policies and behaviour is leading to new products and practices, transforming management models, and helping communities make key decisions about the investment of public and private resources.

Researchers in the social sciences and humanities address questions such as:

- How should Canada's institutions evolve to meet changing environmental conditions? What are appropriate strategies for sustainable, culturally sensitive environmental management?
- What are the economic, social and cultural barriers to the adoption of low-impact renewable energy and other sustainable technologies by individuals, families, communities and businesses?
- What are the implications of international trade agreements on ecological policies and objectives? How do Canadian fiscal frameworks compare with emerging international best practices and trends? How can the financial sector best assess and value environmental performance?
- What are the social, cultural and economic impacts of environmental change and environmental regulation on communities? For example, what are the economic and social impacts of establishing protected areas?
- How can the value of ecosystem services be accurately assessed? What are the alternatives, and how much would they cost? What internal and external barriers do firms face as they shift to managing for the "triple bottom line"?

Since SSHRC's focus on people is central to Canada's science and technology strategy on the environment, such research must be accelerated and increased if Canada is to maintain its place as one of the world's most successful societies. Canada cannot rest on its laurels. Fortunately, this country has the potential to become an international environmental leader by adopting new perspectives, policies and behaviour based on the collaboration of experts in the social sciences, natural sciences, technology and biomedical fields.

For this reason, SSHRC is now working with partners (including Canada's other research councils) to propose additional ways to enhance our efforts to understand the human dimension of environmental issues, and to train the next generation of world-class environmental experts.

Better understanding of how we can improve the complex interactions between nature and individuals, cultures, economies and institutions may not guarantee a better future, but what else is more promising?

Chad Gaffield is president of the Social Sciences and Humanities Research Council of Canada.

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