

Natural resources and community vitality: A rural perspective

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Abstract

British Columbia is uniquely blessed with a spectacular wealth of ecologically diverse natural resources. Beginning with First Nations societies long ago, these resources have been the foundation for the sense of place, quality of life, and economies of rural communities in the province. These communities, however, now face rapid, unprecedented change linked to natural resources—change which emanates from both global and “made-in-BC” sources. Such change creates challenges and uncertainties, but also presents opportunities. A five-point framework used to assess the fate of societies shows that British Columbia’s rural communities will continue to face challenges in areas crucial to their futures. This heightens the need to strengthen community capacity both to anticipate and deal with problems and to seize opportunities. Most rural communities are now committed to taking charge of their futures, and are seeking ways to thrive in this era of change. Although attention paid by science to community sustainability has increased significantly in recent years, much more research is needed. This paper outlines some change-related challenges and opportunities facing rural communities in British Columbia and offers suggestions for important research to help communities build local capacity.

KEYWORDS: *community capacity, community sustainability, rural community.*

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* Editor’s Note

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Context

British Columbia is uniquely blessed with a spectacular wealth of ecologically diverse natural resources. The location of most communities in British Columbia is grounded in the province's geography and natural resources, with transportation routes playing an important role in community location. In a global context, our geographic proximity to nations with large populations who need our natural resources is both a blessing and a curse. Our choice to retain the majority of our natural resources under public ownership is also a blessing and a curse—and is often viewed in different ways by individuals with differing interests. For some British Columbians, public ownership means they retain both the ability to influence management of these and related resources and a share of the benefits from these resources. For others, public ownership limits private investment by resource-based industries and increases costs relative to producers from private lands in other jurisdictions.

Beginning with First Nations cultures long ago, this richness in natural resources has been the foundation for the sense of place, quality of life, and economies of rural communities. From a global perspective, the settler society is relatively recent and the new society we continue to forge is only just emerging. This time frame is juxtaposed with the very long time scales associated with the development and rejuvenation of our natural resources.

In this paper, I first outline the changes facing rural communities in British Columbia and the potential implications. Using a framework that assesses the fate of societies, I then briefly examine the challenges facing these rural communities. I close the paper with suggested contributions from science.

Changes From Beyond and Within

In the decision lexicon, rural communities in British Columbia are currently up against a classic “wicked” problem. Although faced with the uncertainties and challenges created by a long list of complex and interrelated global and “made-in-BC” changes, rural communities must make decisions about their futures. As well, the pace of this change is rapid, at least compared to the seemingly quiet days of the past development era.

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Global-scale Changes

Industrial competitiveness, climate change, oil shortages and price increases, shifting values and the associated quest for sustainability, demographics and technology—we are all familiar with this list of global-scale changes. These changes create particular challenges, implications, and opportunities for rural communities in British Columbia. Although not an exhaustive analysis, Table 1 compiles some of the broad implications of change that come up in rural discussions. Rural communities would greatly benefit from a more thorough analysis of these implications, along with suggestions for pragmatic solutions.

British Columbia Conditions

In addition to the set of global-scale changes and uncertainties, another set of changes exists that relate to natural resources and rural communities in the province. Many of these changes are of our own making and include those related to: First Nations interests; disparity in the distribution of wealth generated from natural resources, and the consequences of decisions related to natural resources; changing resource characteristics and uses; and the reconfiguration of government services. These changes are outlined below.

First Nations Interests

Unresolved First Nations interests are the most crucial issue to many rural citizens, even in the north (Halseth *et al.* 2004). Heightening the situation is the absence of treaties throughout much of the province and the long time frames for treaty negotiations juxtaposed with the need to swiftly implement economic and social development to improve First Nations' quality of life, particularly given the growing numbers of First Nations youth. Most of rural British Columbia is affected by this uncertainty, and many solutions are linked to natural resources.

TABLE 1. Broad-scale changes affecting rural communities in British Columbia

Change	Implications for rural communities
Globalization and competitiveness	Recent – Mining sector downturn; oil and gas boom; timber and agriculture sector trade barriers; and corporate concentration Predicted – Global “wall of wood” coming into the marketplace; United States’ and China’s increasing need for natural resources Opportunities – Tourism; value-based products?; US/China markets?
Climate change	Recent – Mountain pine beetle epidemic; increased interface wildfires; seasonal weather and growing condition changes Predicted – More pest outbreaks; more variable weather with agriculture and tourism implications; changes in energy use; water shortages Opportunities – Species shifts; water use for manufacturing; forests as carbon sinks
Oil shortages and price increases	Recent – Increased fuel prices with transportation cost impacts Predicted – Continuing shortages and price increases Opportunities – Development of provincial resources; industry relocation closer to the source of raw materials; alternative fuels
Shifting values and challenges of sustainability	Recent – Community energies expended on processes; fractured communities and confrontation; rural citizens bear most of the economic consequences of decisions to conserve environmental values Predicted – Increasing interest in sustainability Opportunities – Migration to rural communities for environmental quality of life; community “branding” for sustainability; “sharing the pain” amongst rural and urban citizens
Demographics and aging baby boomers	Recent – Skilled labour and professional worker shortages Predicted – Increased markets for soft adventure tourism; increased concern for the natural environment? Opportunities – Tourism; amenity migration; immigration
Technology boom	Recent - Reduced employment and higher competence requirements in resource industries; competition from engineered substitute products Predicted – Continuing rapid innovation Opportunities – Amenity migration (provided technology and amenities exist)

Disparity in the Distribution of Wealth Generated from Natural Resources and Consequences from Decisions Related to Natural Resources

Industry and government actions in pursuit of improved global competitiveness have resulted in a growing disparity in the distribution of natural resource wealth in the province. During the earlier development era, at least in the forest sector, most rural communities were guaranteed some benefits from timber harvesting through the government’s requirement that timber harvested in a particular management unit be milled within that unit. This perceived impediment to global

competitiveness has been removed, leaving some communities with few benefits from the timber that is harvested from local landscapes (e.g., Creston and Valemont). Other mechanisms are now needed to equitably distribute the benefits of public resource use. The historical drain in the economic potential of rural communities caused by hydro-electric development has been offset by developing “trusts” in the Columbia and Peace river systems—equivalent compensation for the Bridge River system has not occurred.

As well, the “pain” resulting from decisions made by governments and corporations to improve global

competitiveness or to address environmental values frequently affects rural communities disproportionately. Although these decisions are often supported in the Lower Mainland (Vancouver) and Victoria areas, where 65% of the province's population resides (Baxter *et al.* 2005), these citizens aren't seen to bear any of the consequences, unlike citizens in rural areas.

Ongoing timber tenure reform and new institutions such as the Coast Sustainability Trust and the Northern Development Initiative Trust, are encouraging movements in the right direction. What is missing is a well researched, broadly understood, and widely supported set of mechanisms that is consistently applied. The lack of understanding of possible mechanisms also creates challenges in finding solutions that meet First Nations interests.

Resource Characteristics and Uses

Whether it's fisheries, forests, tourism, or energy resources, the characteristics of British Columbia's natural resources are changing. For example:

- Many traditional fisheries are experiencing drastic declines, while aquaculture is expanding.
- Forests are being converted from old- to second-growth or, after the mountain pine beetle epidemic, from pine to other species with a much-reduced harvest rate (and harvesting declines are predicted elsewhere).
- Natural and human-induced changes in forest conditions, and the increasing diversity and amount of commercial and recreational use are altering backcountry experiences.
- Advances in technology and world demands are prompting shifts in the types of energy and mining resources that are economic to extract and process.

In time, growing shortages of fresh water may overwhelm management for many of these other values.

Government Service Reconfiguration

The seemingly unrelenting reconfiguration of government services has dramatically affected rural communities. Significant reshuffling of natural resource agencies continues, with closure of several rural offices. These agencies have suffered a deep loss of expertise through the retirement or severance of many of the more experienced staff. The changes have created confusion and inefficiencies for rural citizens. In addition, the loss of rural health, education, and legal services was drastic, making it difficult for rural communities to see in-migration by new citizens seeking a quieter, rural quality of life, particularly by retirees, as a viable option.

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Thoughts About the Possible Fate of Our Rural Society

On reading Pulitzer-Prize-winning author Jared Diamond's recent book, *Collapse: How Societies Choose to Fail or Succeed* (2005), it seemed appropriate to quickly scan British Columbia's rural societies from the perspective of his five-point framework for assessing the potential fate of societies. This framework assesses:

1. the environmental resilience of the land base and a society's propensity to damage the environment
2. climate change
3. existence of hostile neighbours
4. continuation or disruption in trade relationships
5. a society's response to problems

Based on my top-of-the-mind assessment, I concluded the following.

- Environmental resilience varies across the province, and indicates we must continue to focus on environmental stewardship.
- Climate change is real. Hopefully, it will bring some net benefits to rural British Columbia (e.g., increased agriculture opportunities), although the outcomes will be different in each ecological area. We need to do more to understand the potential opportunities as well as our vulnerability to this factor.
- While we are not currently at war with our neighbours to the south, there are those who see the timber and beef trade issues as "war."
- These trade issues certainly create questions about the stability of our trade relations. As well, the growing need for natural resources by the United States and China will likely affect trade relations with these big trading partners.

Based on this framework, the changes, uncertainties, and challenges that we now face are exactly those that will influence our fate, and these aren't going to get any easier. I believe the kingpin to our future is the last point in the framework—our society's capacity to respond wisely to problems and challenges. For rural communities in British Columbia, this capacity is inextricably linked to natural resources—and here we could do much better.

Possible Contributions from Science

I was asked to comment on the contributions of science within the realm of natural resources and community sustainability. From a general perspective, I am heartened by the growing attention to community issues from individual scientists, FORREX, and several universities, as well as from resource managers and governments; however, to achieve sustainability and to respond wisely to the changes before us, much more scientific research is needed on the social side to balance the historical focus on the ecological side. As well, I believe we need to focus strongly on the factors we *can* influence, particularly on our own capacity to thrive through both global and “made-in-BC” challenges, while being fully informed and mindful of the threats and opportunities that the broader changes create for us. The following represent my research priorities.

Community Capacity and Decision Processes

In the past development era, rural communities were generally content to look to corporations and governments to take care of them. Rural communities, however, are no longer prepared to trust corporations or senior governments with choices that fundamentally affect their stability (and I suspect this is a relief for both company executives and government managers). Instead, they want the information and the ability to make and implement choices for themselves.

Perhaps the most important capacity to develop in rural communities is the ability to cope with, and ideally to thrive in, the sea of ongoing change. Community leaders, staffs of local governments, and the public need better access to information about what might influence their futures—while realizing that what we see as issues today may not matter in the long term. As new challenges emerge, citizens of rural communities, working from the foundation of values and visions that brought them together, want support to take a hard look at the opportunities and obstacles they face, to swiftly chart a path forward, and to implement actions, all the while

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realizing that this path will likely shift as new challenges manifest. Flexibility and resilience become most important in this situation.

I think science can help rural communities thrive in several ways. Researchers can contribute knowledge to inform rural leaders, citizens, and funders—as they have corporations and governments in the past—not only on paper but in fora such as those events organized by FORREX, the MacGregor Model Forest, and the University of Northern British Columbia. I suggest researchers build strong links with community leaders when they engage in community research, basing research efforts on community needs as well as their own research interests. Researchers should structure projects so that local citizens are involved in the design and co-ordination of the project and, ideally, are paid for their contributions. In this way, researchers will leave increased capacity and human knowledge in the community, not just reports. Researchers might also assist communities with capacity planning—that is, identifying the skills and abilities needed in the future, and how to build these capacities within a small population.

Rural communities could greatly benefit from the support of researchers interested in decision processes. It puzzles me that, while structured approaches for aiding complex decisions are used in natural resource situations in other jurisdictions (Gregory 2000), with the exception of BC Hydro’s water-use planning, they are absent from the so-called “wicked” problems we face in natural resource management in British Columbia, even though some of the most competent experts in this field live here.

Research Topics

Several important areas of opportunity are now being researched, including sustainability planning and monitoring processes, climate change vulnerability, amenity migration, and to some degree, the implications of globalization. Three topics that I think deserve more attention are outlined below.

What are the best decisions for British Columbia’s landscapes and communities?

The wickedness of the situation requires thoughtful, knowledgeable consideration of global and made-in-BC changes, and structured thinking about opportunities in order to decide on the best ways to create the most benefits for rural communities and the province. Opportunities are often reduced to a debate that pits development against amenities, which is unproductive

and does a disservice to communities. The concept of diversity—in ecological conditions; natural resource products, uses, and services; institutions and management approaches—is overtaking this old debate, a move that is heartening. Scholarly attention to this topic is lacking, however, and is much needed, particularly to examine leading-edge approaches and technologies.

What is the current distribution of wealth and the consequences generated from natural resource management?

We need to fully understand the current distribution of wealth and the consequences of decisions about natural resource management in British Columbia. The Urban Futures Institute analysis of the province’s economic base (Baxter *et al.* 2005), which showed that “two thirds of provincial export income is earned by the forestry, mining, fishing, energy and agricultural sectors, sectors which are predominantly non-metropolitan,” is a start. Forestry Canada’s regional economic modelling for the mountain pine beetle epidemic (Patriquin *et al.* 2005) is also helpful at the regional level. Retrospective studies of the expected and actual distribution of consequences following past land-use decisions, and the implications of approaches to mitigate consequences would be very illuminating.

Are there better mechanisms for sharing the wealth and the consequences and for planning and licencing resource uses?

Once we understand the current distribution of wealth, if redistribution is justified (as perceived in rural communities), then we should examine the current mechanisms, including the recent development “trusts,” and mechanisms used in other jurisdictions. The strengths and challenges associated with each of these approaches should be broadly communicated so that rural communities can advocate for the mechanisms which best fit their needs.

New mechanisms are also needed for planning and licencing the broad range of natural resource uses so that rural communities can implement community development plans and secure their fair share of the benefits. Expanded timber tenuring mechanisms are being developed through the Forest Revitalization process, and tenuring for non-timber products is being pursued through the new initiative at Royal Roads University; however, the growing issues surrounding backcountry recreation and tourism uses need to be addressed immediately. In rural British Columbia, these uses are becoming a more prominent component of

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community development plans, but their implementation is hampered by the lack of planning, tenures, and enforcement tools, as well as limited government capacity (and perhaps appetite) for these often contentious and politically sensitive situations. We risk losing the “Super, Natural British Columbia” experience if we don’t address these issues very soon.

Reasons For Hope

In the final chapter of *Collapse* (2005), Jared Diamond offers some reasons for hope that I believe speak directly to us in British Columbia. To avoid a dismal fate, Diamond encourages the following actions, which British Columbians can take, to create a bright future regardless of the challenges:

- ... courage to practice long-term thinking, and make bold, courageous, anticipatory decisions . . . before (situations reach) crisis proportions.*
- ... courage to make painful decisions about values.*
- ... opportunity to learn from mistakes of distant people and past peoples.*

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Test Your Knowledge . . .

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How well can you recall some of the main messages in the preceding perspectives paper? Test your knowledge by answering the following questions.

1. What are the six global trends affecting rural communities in British Columbia?
2. What is the current distribution of wealth from British Columbia's natural resources?
 - A) More to urban areas than rural areas
 - B) More to rural areas than urban areas
 - C) We don't know
3. What is the most critical "made-in-BC" condition affecting rural British Columbia?
 - A) Unresolved First Nations' interests
 - B) Changing resource characteristics and uses
 - C) Government service reconfigurations
4. What factors does Jared Diamond include in his framework for assessing the fate of a society?

ANSWERS

1. Six global trends are: (1) globalization and competitiveness; (2) climate change; (3) oil shortages and price increases; (4) shifting values and challenges of sustainability; (5) demographics and aging baby boomers; and (6) the technology boom.
2. C
3. A
4. Diamond's five factors are: (1) the environmental resilience of the land base and a society's propensity to damage the environment; (2) climate change; (3) existence of hostile neighbours; (4) continuation or disruption in trade relationships; and (5) a society's response to problems.