



tomorrow's forests

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THE SFM NETWORK NEWSLETTER

Research excellence through training, networking,
partnerships and knowledge exchange



Government-controlled Market-based Stumpage System can perform as well as a Market Pricing System

By SFM Network
Staff

The economic analysis done by University of Toronto Economist Professor Shashi Kant, winner of the IUFRO Scientific Achievement Award, Ontario's Premier Research Excellence Award, and most recently the CIF 2007 Canadian Forestry Scientific Achievement Award, is putting Canada in a stronger position to further disprove the United States claim about the Canadian Stumpage System.

Dr. Shashi Kant has advanced an economic analysis that challenges the views of the U.S. forestry industry and policy makers about Canada's wood pricing system. The research team led by Dr. Kant has demonstrated clearly that Ontario's stumpage system, which is based on market prices of wood products but controlled by the Ontario government, performs as well as other pricing systems of standing timber. In fact, the government-controlled stumpage pricing system, if designed and revised regularly to incorporate the dynamics of wood products markets, may prove better than the market system, specifically for sustainability of forests and communities.

Dr. Kant is Associate Professor and forest economist, Faculty of Forestry, University of Toronto. He is also an SFM Network Principal Investigator for a project entitled, "Market and institutional structures, economic welfare and

global competitiveness of the Canadian forest industry." The main research objectives are:

- (i) to develop an understanding of markets and institutional structures related to different forest products (i.e., lumber, pulp and OSB) in Canada and other countries;
- (ii) to examine the impact on the economic well-being of Canadians and the forest industry of market structures and relevant government policies; and
- (iii) to evaluate the global competitiveness vis-à-vis other countries of different sectors of the Canadian forest industry.

Dr. Kant is undertaking this project with seven other researchers from the University of Victoria, University of New Brunswick, Canadian Forest Service, Finnish Forestry Research Institute, Beijing Forestry University, and UFAC Brazil.

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Dr. Shashi Kant standing beside a woodpile owned by the Lecours Lumber Company Ltd, Calstock, Ontario. ▼



every market including energy, agriculture and transportation to name a few. Hence, the question is not about government control, but how well government-controlled markets perform with respect to efficiency and social welfare.

Market Performance of Ontario's Stumpage System

From June 1995 to February 2005, as per the economic analysis of monthly data, the stumpage price of Spruce-Pine-Fir (SPF) standing

The Network's focus on interdisciplinary research has provided the most productive medium for my thinking in this area. It has enabled me to work on diverse projects ranging from Aboriginal values and tenure to the global competitiveness of the forest industry.

Dr. Shashi Kant

Dr. Kant is internationally recognized for his integrative approach to economic and social issues related to sustainable forest management and for extending the boundaries of forest economics. "The SFM Network deserves much credit for my work on this integrative approach. The Network's focus on interdisciplinary research has provided the most productive medium for my thinking in this area. It has enabled me to work on diverse projects ranging from Aboriginal values and tenure to the global competitiveness of the forest industry," says, Dr. Kant.

Kant argues that if government-controlled capital markets can perform efficiently and in the interest of social welfare, why cannot there be government-controlled standing timber markets? He also maintains that governments control to some degree, either directly or indirectly, almost

timber was co-integrated with its reference price. This reference price represents a one-month lagged SPF market price in the U.S. and Canadian markets. The analysis shows that a change in reference price causes a change in the stumpage price. The stumpage price for SPF, therefore, reflects the market value of SPF timber. Any increase in the market price of SPF lumber in U.S. and Canadian markets is transferred to the stumpage price.

These results indicate that Ontario's government-controlled stumpage system is performing well with respect to soft-wood lumber (for SPF timber), and may continue to perform well as long as there are no government-induced market



SFM Network Scientific Director Dr. Jim Fyles
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imperfections in the softwood lumber market. In fact, under a tariff trade regime, Ontario's softwood lumber producers will have to pay tariffs as well as higher stumpage prices. Tariff regimes then work as a double-edged sword to the detriment of Ontario's softwood lumber producers.

Dr. Kant's group developed and used the Enhanced Parity Bound Model (EPBM) to examine differences between the administratively determined stumpage price and the true market value of stumpage. EPBM estimation results indicate that the prices determined through Ontario's stumpage system may be lower or higher than the market value in the short-run, but in the long-run, underpayments and overpayments even out. A comparison of Ontario's government-controlled stumpage system with the auction-based stumpage system in British Columbia, and evidence from U.S. timber auctions, indicates that Ontario's stumpage system is as good as the auction system in terms of reflecting the market value of standing timber. In addition, the renewal charge component of Ontario's stumpage system guarantees sufficient funding for regeneration and protection of forests, which contributes to the sustainability of forests and communities.

Integration of Softwood Lumber Markets of the U.S. and Canada

Dr. Kant's group also tested economic features of the U.S. and Canadian markets for twelve homogenous softwood lumber products – five products each of SPF and HF (Hem Fir) and two products of Douglas Fir. The U.S. and Canadian markets for each product are co-integrated, which means that the prices for these products move together or there is no possibility of arbitrage among the homogeneous softwood product markets. In the absence of the possibility of arbitrage between the U.S. and Canadian markets, Kant maintains there is no sound economic rationale for softwood lumber trade restrictions between the two countries.

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Expanding Horizons

We all want to choose our destiny. We want the future to be ours. We are surrounded by images of what we should do to have the future we want. Invest with us and you will retire to a cottage on a lake in eternal sunshine; buy this model car and you will have the freedom you long for; use this product and you will be eternally young.

The Canadian forest is no different. We want to be able to decide the future of the land we need and love. This is what sustainable forest management is all about: making decisions that will lead us to a future we want for our children and theirs.

But the events of the last few years have shown clearly that there are limits on our ability to choose the destiny of the Canadian forest. The forest products industry is a global marketplace in which decisions made in Beijing or Rio de Janeiro determine what is possible in Canada. The changing climate that will transform our forest is determined almost entirely by actions beyond our borders. Energy, global security, demographics... the list of things outside our region or country that control the future of our forest is long.

For several years, the SFM Network has been expanding the horizons of its research from forest stands and watersheds to a more globalized perspective. If we wish to choose a future for our forest, we must understand the forces that influence that future and many of those forces come from beyond our borders. The work of **Shashi Kant**, profiled in this issue, is a good example of research that seeks to understand international forces that have national, regional and local consequences for our forest. The importance of local level forces is illustrated in two new Research Notes, one describing the benefits of Aboriginal land-use studies for forest planning, and another, based on research by **Iain Davidson-Hunt**, gives perspectives from Pikangikum Elders on how forest management in northern Ontario can maintain Caribou.

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Whither the Forests of Canada? SFM Network's Forest Futures Project

By Peter Duinker
Project Manager / Core Team Chair



Just under half of Canada's land area is forested, and those forests account for about one-tenth of all the world's forests. The range of values associated with our forests increases constantly - we cherish forests and trees for a myriad of social, economic and ecological reasons. At the same time, our dialogues are replete with ominous warnings about how we have mistreated our forest ecosystems and continue to do so. Are we indeed running our forests into the proverbial ground or is Canada's forest future bright? No one really knows!

I frequently remind myself of a poignant pair of questions articulated by William C. Clark while I was part of his project on "Ecologically Sustainable Development of the Biosphere" at International Institute for Applied Systems Analysis. In paraphrase, he said: what kind of garden do we want, and what kind of garden can we get?

We can generate significant new understandings by positing possible scenarios of how the future of forests and the forest sector might unfold, and analyzing those scenarios to gain insights into promising policies we can put in place today.

Dr. Peter Duinker

In his book *Speaking Truth to Power*, Aaron Wildavsky complemented that picture as he identified the two key domains of policy: objectives and resources. In other words, what destiny might we choose and how might we help cause it to become reality? To secure a good future for resources and the environment, such statements point to a critical need for incisive futures-oriented analysis.

Death and taxes are said to be the future's only certainties. To this we must add – uncertainty. As Jim Fyles said in his article, trying to predict the long-term future state of Canada's forests and forest sector, in terms of saying concrete things with high confidence, is unhelpful. However,

consistent with the principles and practices espoused by many of today's future scholars, we can generate significant new understandings by positing possible scenarios of how the future of forests and the forest sector might unfold, and analyzing those scenarios to gain insights into promising policies we can put in place today.

That is what the SFM Network's **Forest Futures Project** is all about. It's an idea we have never tried before and it represents a bold step for the Network. Taking cues from some of North America's top scenario-analysis practitioners, we will be using a highly participatory approach to generate a small set of plausible scenarios and analyzing them for hints as to which directions to avoid and which to promote. Early work, now underway, consists of determining and describing the key drivers of change in forests and the forest sector. It also includes scoping and sketching out four different storylines to form the backbones of the scenarios. During the rest of 2007, we will fill out the scenarios – national in scope and extending to the year 2050 – and undertake preliminary analysis on policy implications.

The Core Team, comprised mostly of SFM Network Research Area Leaders, will use workshops as the main mechanism for obtaining input and insights from forest stakeholders across Canada. We plan to hold a series of workshops in 2008 in which participants can examine the scenarios, determine their regional relevance and implications, and discuss promising policy options.

We welcome your thoughts and contributions, and hope to see you at a forthcoming workshop to discuss the future shape of Canada's forests and forest sector.

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Expanding Horizons *Continued from page 3*

One of the key steps in choosing a destiny is understanding the possibilities. Predicting the future is an imprecise art, but describing possible futures is more easily done and can help us prepare for what could happen. We test our fire alarms not because of a prediction but because of a possibility.

The Forest Futures project that **Peter Duinker** describes in his article is a process that will encourage discussion of possible futures for the Canadian forest. Given the complexity of the forest and the economy and society it supports, we need to bring to the discussion expertise and experience from all of the Network's industry, government, Aboriginal, NGO and academic communities. Ultimately, through this project we hope to provide Canadians with storylines that tell how our forest future could unfold, which will then help us choose how we would like it to unfold. Choosing to embrace or avoid a possible future will encourage us to act.



Old growth forest, Nova Scotia.

Learning from our Aboriginal Partners

By Marvin Abugov
SFM Network

Two recent Research Notes dramatically highlight the importance of involving and working with Aboriginal peoples to develop sustainable forest management practices on traditional Aboriginal lands in Canada's Boreal forests.

Benefits of Aboriginal Land Use Studies summarizes the findings of previously conducted land use research work. SFM Network approaches in general are designed to sustain the social, ecological and economic values and capitals associated with Canadian forests for current and future generations. In view of this, land use and occupancy studies serve to document Aboriginal peoples' presence on traditional lands, including the description of traditional and contemporary uses and relationships with the land. Such information serves as a 'heads-up' to government and industries as to what Aboriginal people value. Equally important, these studies enable local Aboriginal people to become an essential part of the land-use planning process, involving them in decision-making while providing those involved in the process with more in-depth knowledge of, and experience with, traditional land use practices and cultural traditions.

Three management recommendations are provided:

- (1) Land use studies need to be conducted with community approval and active participation.
- (2) Land use studies should be viewed as ongoing processes, and data should be reviewed and updated regularly.
- (3) Aboriginal people want to be able to use the results to assess the effects of development on their traditional lands and activities so they can participate meaningfully in subsequent land use planning activities and developments.

Keeping Woodland Caribou in the Whitefeather Forest sheds light on the way in which the Anishinaabe people perceive the land, its wildlife and its use for resource extraction. The Pikangikum community, just north of Red Lake, is featured. In 1996, the Pikangikum First Nation began working with the Ontario Ministry of Natural Resources (OMNR) to engage in sustainable forest management within the Whitefeather Forest area, a portion of Pikangikum traditional lands.



Pikangikum elders support the direction taken by the First Nation to begin commercial forestry operations on their traditional lands; however, they would like to guide forest planning and management so that the 'living ones' are not put at risk through new land use practices. They have heard that sustained yield forestry practices, the use of plantations and increased occupancy of lands to the south of their traditional territories have made it difficult for woodland caribou and other living ones to survive on those lands. In the Whitefeather Forest, the elders want to protect the caribou's present range of movement over the landscape. In particular, Pikangikum elders want the whole Whitefeather Forest to share the same level of stewardship, even if different land uses are practiced in different places. This includes the caribou's winter feeding areas, spring migration routes, summer calving areas and fall rutting grounds. For this reason, provincial parks and other such preservation areas and corridors are not the answer. To quote Elder Gideon Peters: "Regulation was not the intention of the Creator; the intention was for every creature to roam freely. Once you draw the lines and regulate, that will cause them to be extinct . . . what are we going to do if we regulate all these boundaries and the caribou will disappear?"

The elders feel strongly that simply recording observation data in a GIS database is insufficient. There is much more to their knowledge than simply drawing points, lines and polygons on a map. The research note provides many valuable insights as to the Pikangikum peoples' values, concerns and responsibilities. For example, Pikangikum



elders believe that caribou are sentient beings; that is, that caribou have similar needs to those of the Anishinaabe people. As sentient beings, caribou need to be free to make their own choices about how to move about the landscape; they should not be constrained by how people use the land.

As a result of this unique research, the following management recommendations are provided:

- (1) Important caribou habitat should be classified based on ecological characteristics and functions, rather than by geographic locations on the land. In the same way, forest harvest and renewal strategies should be designed to ensure the same kind of forest is regenerated following timber harvesting, in structural and functional terms, as what was provided to Pikangikum people by the Creator.
- (2) Forest management planning approaches should reflect the dynamic nature of the Whitefeather Forest landscape, the whole of which, now and into the future, is potentially or effectively woodland caribou habitat.
- (3) All planning tasks (i.e. forest management plans, designated protected area plans, land use permits, etc.) need to be coordinated by a collaborative management authority that is guided by the Elders and considers the Pikangikum peoples' ancestral territory holistically.

For complete details, please visit the SFM Network website: www.sfmnetwork.ca. See Publications / Research Notes.

All of the Network's synthesis documents and research notes can be downloaded from the website free of charge.

Little Red River Cree Nation

Grand Chief Sewepagaham's Speech Receiving Honorary Doctorate from Athabasca University

June 8, 2007

This is a day of celebration. I thank the Board of Governors of Athabasca University for this honour, and each of you for allowing me to share in this convocation.

In my work as Chief for the Little Red River Cree Nation, I have spent twenty years undertaking to improve the quality of life for members of my Nation, and trying to establish a balance between resource development and conservation within our boreal forest homeland. I like to think that what has been accomplished to-date is good, but I realize that these tasks remain to be completed.

Many of you graduates will now undertake professional careers which bring you into contact with my peoples, and other peoples in the north, whose day-to-day lives are being impacted by resource development processes beyond their control.

We face a resource development future which threatens the health and way-of-life of northern peoples. Maintaining the integrity of the Boreal and the health of our communities will require collective vision and action by all peoples of the north.

Each of you have acquired education and skills which could be used to ensure that northern development is managed so as to allow all of us to prosper, while ensuring that this Boreal homeland can be enjoyed by our children and grandchildren.

This is the challenge of your time – a gift and an obligation – celebrate today, then go into the future with an intention to make a difference, to make things better than you find them, and with certain knowledge that your actions will help to bring about positive changes in the lives of others.



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Vision

The forests of Canada will maintain their extent, diversity and ecological vitality and be managed in a manner that will provide for the broad social, cultural and economic needs of all Canadians.

Mission

The Sustainable Forest Management Network is a national partnership in research and training excellence. Its mission is to deliver an internationally recognized, interdisciplinary program that undertakes relevant university-based research. It will develop networks of researchers, industry, government and First Nations partners, and offer innovative approaches to knowledge transfer. The Network will train scientists and advanced practitioners to meet the challenges of modern natural resource management.

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