

DEPARTMENT OF

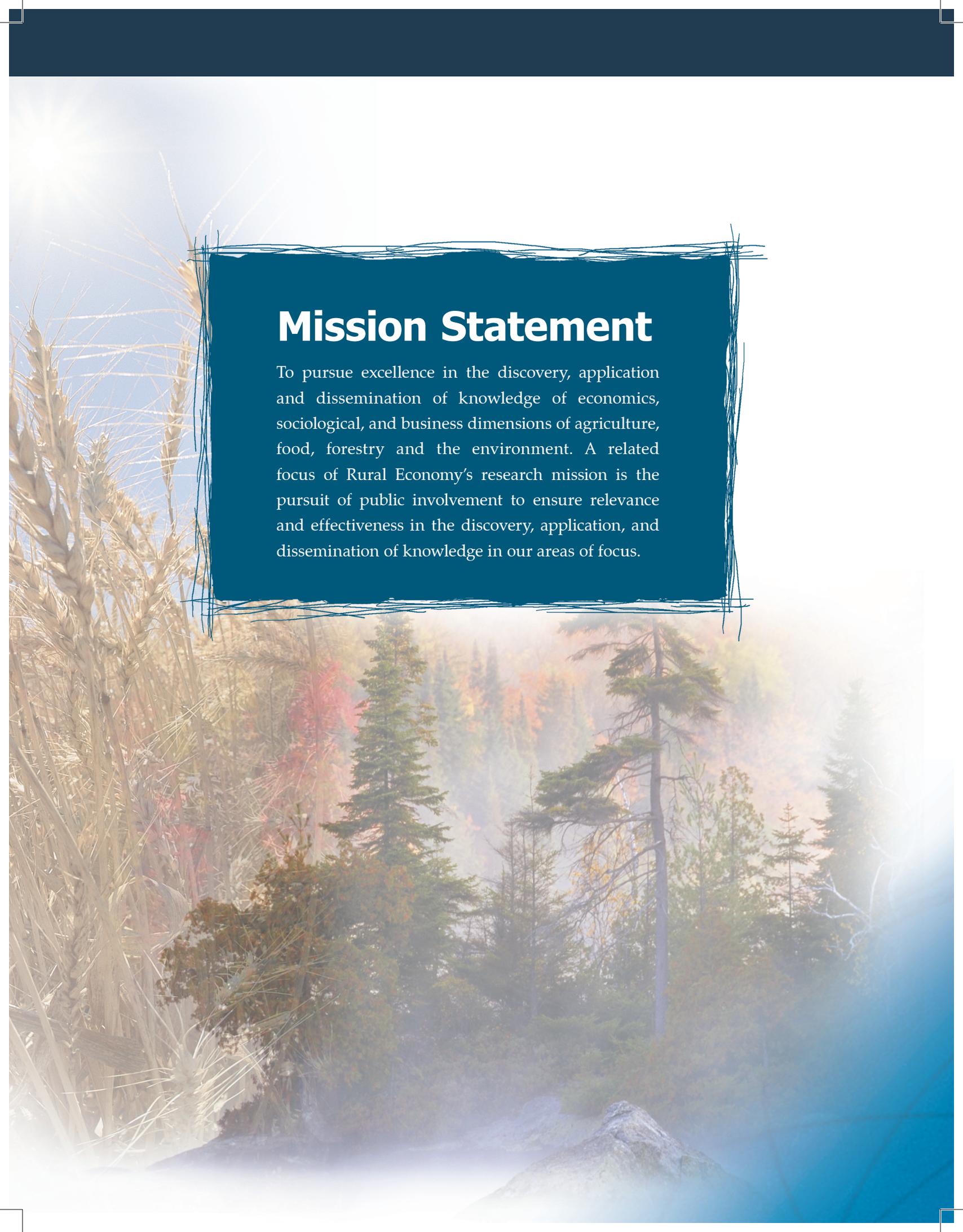
Rural Economy



ANNUAL REPORT

2005





Mission Statement

To pursue excellence in the discovery, application and dissemination of knowledge of economics, sociological, and business dimensions of agriculture, food, forestry and the environment. A related focus of Rural Economy's research mission is the pursuit of public involvement to ensure relevance and effectiveness in the discovery, application, and dissemination of knowledge in our areas of focus.

Message *from the* Dean

The Department of Rural Economy has had another impressive year as it continues to cement its leadership position nationally and internationally with an incredible range of activities. The Department of Rural Economy



continues to be one of the leading departments of its type within Canada.

Although the Faculty of Agriculture, Forestry and Home Economics at the University of Alberta has many award winning graduate students the Department of Rural Economy has a particularly impressive record in this area. Wuyang Hu was the recipient of two major awards for quality of

PhD thesis. Two undergraduate students presented papers at the American Agricultural Economics Association annual meeting and placed first and second, a significant achievement in an international competition.

The Department of Rural Economy is committed to providing research excellence with a major focus on research that is of direct practical relevance for decision makers in government and industry. Recent examples of

this include the department's involvement in the provincial IFASA through the Value-Added Meats program and new relationships with Agriculture and Agri-Food Canada in watershed management. The Cooperative Program in Agricultural Marketing and Business, funded largely through an industry endowment, continues to provide a link with external organizations through its annual symposium and through other outreach activities. Many of the researchers in the Department are directly connected with Sustainable Forest Management network activities and this also provides for direct links with forestry related industry organizations.

As usual researchers in the department were successful in obtaining significant research grants from national, provincial and industry funders. The ratio of research dollars received per staff member continues to be one of the highest achieved at the University of Alberta.

This report provides only a brief overview of the fascinating activities and successes that occurred in the Department in 2005. I hope that the contents of the report will encourage you to find new ways to collaborate with the Department of Rural Economy and you will enjoy discovering more about the productivity of this unit within this Faculty.

John Kennelly

Message *from the* Department Chair

Rural Economy had a great year in 2005. We had the pleasure of hiring new staff members, Chokri Dridi, who has interests in resource economics with a particular focus on water and Tomas Nilsson, who has interests in agricultural marketing issues and market structure. Our staff and students were very successful in winning awards through a variety of venues. Vic Adamowicz received the University of Alberta's highest research honour in the J. Gordon Kaplan Award, only the second person ever to win this award from our Faculty. Peter Boxall was awarded a Killam Annual Professor award in another University wide competition. These awards both reflect extremely high levels of productivity and my colleagues are to be widely commended. One of our recent PhD graduates, Wuyang Hu, who has taken employment in the Department of Resource Economics at the University of Nevada, received major recognition for his PhD thesis (Three Essays on Genetically Modified Food Labelling and Consumer Behaviour), winning an Honourable Mention from the Canadian Agricultural Economics Society and the William Applebaum Award from the Food Distribution Research Society.

Researchers were also successful in obtaining funding from a variety of national and provincial sources to examine everything from consumer concerns about health

risks from local water, carbon credit trading, CLA enriched milk products to community provision of antiretroviral treatments for AIDS patients in rural Uganda. These projects, as well as others, reflect our response to the pressing needs for research in the agriculture, food, forest and environment from both sociology and economics perspectives.

I wish to take the opportunity to thank the many individuals who have contributed to the achievements of the Department this year. These include staff, both academic and support, colleagues across North America who contribute to collaborative research programs and to providing input on staff promotion, evaluation and nomination for awards, and our many contributors from government and industry within Alberta who provide input on Advisory committees (e.g. *Cooperative Chair in Agricultural Marketing and Business*) and research and teaching collaborations.



Ellen Goddard

Farming and Wetland Loss in the Prairie Pothole Region: An Economic Study

The Prairie Pothole Region (PPR) is a critical habitat area for North American waterfowl and other wildlife. The PPR in Canada is estimated to be 491,000 km², of which 254,000 km² were in annual crops and summer fallow in 2001. There is continuing pressure on these habitat areas from agricultural drainage activities. Draining wetlands for agricultural uses is attractive to farm operators for several reasons. It allows farm operators to expand their cultivated land base, potentially provides yield increases and can result in shifts to higher valued crops.

A research project, funded in part by Ducks Unlimited, was undertaken to evaluate the on-farm economics of drainage in the PPR. A farm level stochastic simulation model incorporating wetland drainage decisions was used to evaluate the economics of wetland drainage and incremental impact of Canadian Agricultural Income Stabilization (CAIS) type programs on wetland surface drainage.

The setting for the analysis was the rural municipality (RM) of Emerald in the east-central Saskatchewan PPR, where grain and oilseed farms average 500 hectares in size. The model included weather risk, yield risk, price risk, different land types and farm time constraints. Three drainage scenarios were identified and modeled, differing in terms of assumptions regarding availability and ownership of drainage equipment. These were a) requiring the farm operator to purchase drainage equipment, b) allowing the operator to rent the necessary equipment, and c) assuming that the operator already owned drainage equipment (i.e., drainage was ongoing).

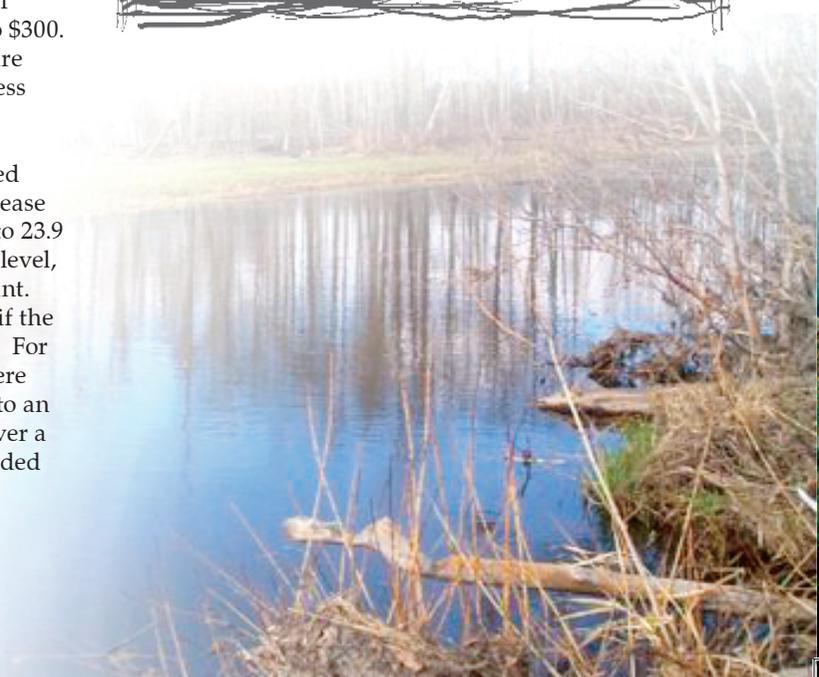
Simulation results for an "average" Emerald grain farm indicated that drainage of wetlands provides significant private on-farm benefits. Each average hectare (ha) of drained land increased the value of the farm by up to \$300. Converted to an annual basis, these private benefits are \$30-\$31/ha. However these private benefits may be less than the total societal costs due to the wetland loss.

Over a 20-year time horizon the incremental simulated impact of CAIS on the average grain farm was to increase the wetland area drained on from 22.8 hectares (ha) to 23.9 ha (i.e., a 5 per cent increase). At the individual farm level, a 1.15 ha loss in wetland habitat may seem insignificant. However, the wetland loss becomes more significant if the potential for drainage is examined at a regional level. For example, if all farms in the RM of Emerald in 2001 were identical to the average farm, CAIS might contribute to an additional 193 ha of wetland habitat loss in the RM over a 20 year period. These results, with care, can be extended to larger areas of the PPR.

The positive returns to drainage found in this study suggest that further wetland loss in the RM of Emerald can be expected. Extrapolating these losses in wetland benefits to the PPR in Western Canada suggests that income support programs such as CAIS may have significant societal costs. Policy makers need to evaluate methods for maintaining wetlands in farming regions and the associated impacts of income support programs on wetland drainage.

Acknowledgements: Brett G. Cortus passed away a short time after completing this research. The authors are grateful for the funding support provided by Ducks Unlimited Canada and the Social Sciences and Humanities Research Council of Canada (SSHRC). The authors thank Jonathan Thompson, Paul Thoroughgood, Lyle Boychuk, and Cynthia Edwards from Ducks Unlimited Canada for their insight into drainage in Saskatchewan. Joe Novak of Saskatchewan Agriculture, Food and Rural Revitalization, Lorelei Hulston of the Saskatchewan Crop Insurance Corporation, Dr. Paul Bullock of the University of Manitoba, and Brian Biggs of Statistics Canada also provided data and assistance that proved invaluable.

Farms are under continual economic pressure to drain wetlands in Western Canada, yet these wetlands are a valuable resource to society. Payments to farmers to maintain wetlands or tying income support programs to wetlands maintenance are possible tools to reduce the economic pressures to drain wetlands.



Local ownership as an Antidote to Globalization ...or not?

Understanding the community dynamics that lead to local ownership and the challenges local owners face having taken over their responsibilities from a corporate or government owner is critical to the development of sustainable communities. Six cases of local ownership of forest product mills and tenures across Canada have been examined in detail in an attempt to enhance this understanding. Each buy-out case represented actors who pooled their powers, forming bundles of owners, workers and/or beneficiaries to act together to obtain greater control over their resource and increase the right and access to benefit from those resources. The research findings challenge the notion that local ownership is an antidote to the theorized negative impacts of extra-local ownership, particularly a weakening of resilience. Community resilience entails intentional actions undertaken to enhance collective capacity to respond to adversity and stressful events. Varghese et al. (2006) argue that four important variables influence the relationship between local ownership and resiliency.

The first important variable is the composition of ownership, which is especially important for buyouts that involve capital intensive ventures. The composition of ownership affects both the autonomy and power conferred at the local level, which then affects local flexibility in decision making and scope and distribution of benefits captured at a local level. The second important variable, type of local ownership influences the decision making power of local and extra-local groups. Generally the more inclusive the ownership structures across employees, managers, and community members, the greater the likelihood of explicit goals to support local jobs, community programs, and long-term viability of the business. Thirdly, the extent of local ownership affects the level of involvement and commitment of local and extra-local groups. Local ownership is defined as any situation where owners are at least 51 percent local, but it ranged from 59 percent to 100 percent within these six cases. Local owners may not act much differently from former corporate owners; their actions depend on the initial purpose of the local buyout and the influence exercised by those with a "local agenda" on the Board of

Directors. Fourth, the level of control with local ownership varied. After the initial buyout, ownership composition and structure changed in most of our cases, shifting to more local ownership, corporate ownership (through a sale of the locally owned firm), or public ownership. Even when local owners are majority owners, their proportional representation on the Board of Directors was sometimes low, limiting access to benefits of local ownership. Across the cases, we found increased accountability to local interests from local ownership, but particularly for broader forms of ownership (e.g., cooperative and social ownership).

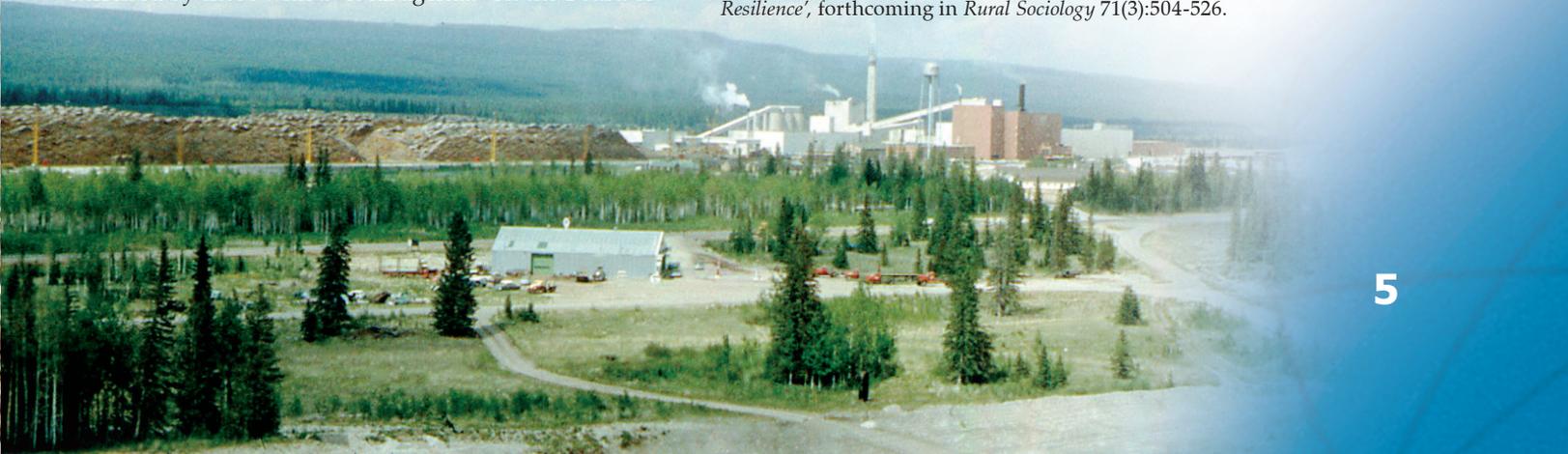
This study calls for greater attention to the distribution of benefits associated with different kinds of ownership structures, the role community resilience plays in a community's evolution of ownership across time, and the patterns of interaction between large owners, community owners, and the state in efforts to increase local ownership

In an era of forest business closures, local groups have been successful in taking over mills.

and control. Further output from this research project will address the key social impacts of local ownership, crisis-based buyouts vs. opportunistic buyouts, and the role of social learning in community efforts to assume greater ownership and control over an enterprise that tends toward large, corporate owners.

Varghese, J., 2005, 'Social Impacts of and Challenges for Local Ownership in the Forest Sector', unpublished PhD thesis, Department of Rural Economy, University of Alberta. Jeji Varghese is currently a Research Associate with the Guelph Water Management Group (GWMG) in the Department of Geography at the University of Guelph. Jeji also teaches a 4th year Environmental Sociology class at Wilfrid Laurier University.

Varghese, J., N. Krogman, T. Beckley, and S. Nadeau. 2006, 'Critical Analysis of the Relationship between Local Ownership and Community Resilience', forthcoming in *Rural Sociology* 71(3):504-526.



Caribou and Cranberries

How Aboriginal Communities deal with Changing Northern Ecosystems!

Increasing levels of resource development in the Canadian north, coupled with concerns about climate change, are raising urgent questions about the resilience of northern communities or their capacity to buffer, cope or adapt to change in ways that are socially and ecologically sustainable. Traditional knowledge and practices for dealing with variability in the abundance and distribution of valued natural resources, including forest resources and wildlife, are among those that demonstrate the capacity of northern communities for learning and adaptation.

Many northern Aboriginal peoples, including caribou hunters and berry harvesters, have expert knowledge about local scale ecosystem dynamics.

Brenda Parlee (University of Alberta), Fikret Berkes (University of Manitoba), the Teetl'it Gwich'in Renewable Resources Council (Fort McPherson, NT) documented three kinds of "rules" developed by Gwich'in women for managing a 'commons' (berry patches) including rules related to access, sharing information and sharing of the harvest. The key finding is that the rules become more or less enforced depending on the abundance or scarcity of the resource.

Another approach to learning and adaptation documented by Parlee, Micheline Manseau (Parks Canada/University of Manitoba) and Lutsel K'e Dene First Nation (Lutsel K'e, NT) focused on barren ground caribou (*Rangifer tarandus*). By observing caribou at key water crossings during the fall migration, Denesoline hunters were able to obtain critical information about caribou health, population and movement patterns. Systematic observation of these indicators by hunters, strategically organized along the treeline, enabled the Denesoline to adapt their harvesting practices, including the location of family camps, to maximize harvest success. While this system was traditionally developed for subsistence harvesting, it may be usefully adapted to other natural resource management contexts; in particular it may be useful for understanding how new bifurcation points created by mineral resource development may be affecting the Bathurst caribou herd. As governments, communities and academics search for ways of including traditional knowledge in that resource management context, it is critical to recognize that the Denesoline and other indigenous peoples have their own systems of watching, listening, learning, understanding and adapting to ecological change.



Alice Blake harvesting blueberries at the northern edge of the boreal forest near Fort McPherson

Parlee, B., F. Berkes and Teetl'it Gwich'in Renewable Resources Council, 2006, "Indigenous Knowledge of Ecological Variability and Commons Management; A Case Study on Berry Harvesting from Northern Canada" *Human Ecology* 34(4).

Parlee, B., M. Manseau and Lutsel K'e First Nation, 2005, "Using Traditional Knowledge to Adapt to Change: Denesoline Monitoring of Caribou Movements" *Arctic* 58(1): 26-37.

Are Capital Constraints threatening Survival of Canadian Co-operatives?

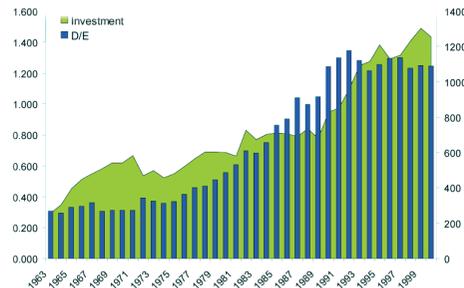


The underlying rationale for the formation of co-operatives is to improve the welfare of their members and society. Co-operatives have a rich history of empowering people, providing needed services in isolated communities, and finding unique solutions for many economic and social problems. However, co-operatives' market share has plummeted precipitously in most sectors over the past decade. For example, the market share for Canadian dairy co-operatives dropped from a high of 59 per cent in 1991 to 42 per cent in 2001; for grain co-operatives, from 74 per cent to 45 per cent in the same time period. The disappearance of co-operatives in many sectors may have an impact on producer and social welfare.

Increasing efficiency is critical to the long term financial success of Canadian co-operatives.

One factor potentially contributing to the decline in position of co-operatives may be their ability to manage capital investment. The issue around capital constraints in co-operatives has attracted public attention in Canada and elsewhere. In response to this problem in Canada, some co-operatives have been involved in mergers (e.g., Manitoba Pool Elevators and Alberta Wheat Pool), acquisitions of other businesses (e.g., Saskatchewan Wheat Pool), joint ventures (e.g., Saskatchewan Wheat Pool and James Richardson International Limited), strategic alliances (e.g., Saskatchewan Wheat Pool and Cargill; United Grain Growers and Archer Daniels Midland), and public offerings (e.g., Saskatchewan Wheat Pool; United Grain Growers). However, in many cases these moves have resulted in the disappearance of the co-operative business structure. This may suggest that if the organization wishes to remain a co-operative these external equity capital sources may not be feasible.

One potential problem area for co-operatives may be agency costs of debt and the impact of these costs on variable costs of production. Research results indicate that the existence of agency costs of debt may depend on the structure of the co-operative and the industry regulatory environment. For example, Hailu (2005) showed that for one co-operative operating in a non-supply managed industry, a 10 per cent increase in the level of debt results in a 0.67 per cent increase in the variable costs of processing and marketing its members' products. This means that for every \$10 borrowed, the costs of production may increase by about 6.7 cents as a result of conflicts of



Non-Financial Co-operatives - Canada Investment (\$ million) and Debt to Equity Ratios

interest between managers and capital providers. Agency costs of this magnitude would certainly be an important determinant of the firm's capital structure decision. If the agency costs of debt exist but are not included in capital budgeting decision-making, it may lead to an overestimation of the expected net benefits of capital investment.

Further results indicate that the costs of production of Canadian agribusiness co-operatives could have been reduced by more than 15 per cent had they been operating to their maximum efficiency, over the period 1980 to 2001. For example, dairy marketing co-operative costs could have been reduced by approximately 25 per cent had the co-operatives been operating on the cost frontier for that industry. For honey marketing and farm input supply co-operatives, the potential cost savings were approximately 15 per cent. Accordingly, improved cost efficiency may be one avenue for co-operative businesses to explore in order to insulate themselves from increasing competitive rivalry. Further analysis showed that excessive debt had a negative influence on the efficiency of co-operatives in all industries investigated, except for co-operatives in the feed mill industry.

In Canada, capital constraints and the strategies used to ameliorate those constraints have affected co-operative firms. The effects, however, depend on the type of industry, co-operative structure (federated vs. centralized), co-operative type (marketing vs. supply), co-operative size (small vs. large) and regulatory environment (regulated vs. unregulated industry). The problems related to the negative relationship between debt leverage and performance may be lessened by mobilizing equity capital. New incentive mechanisms and strategies are required to stimulate member and community involvement to strengthen the capital base needed to compete in the market place.

Hailu, Getu, 2005, "Principal Agent Problems and Capital Constraints in Canadian Agribusiness Supply and Marketing Co-operatives" unpublished PhD thesis, Department of Rural Economy, University of Alberta. Getu Hailu is currently an Assistant Professor in the Department of Food, Agriculture and Resource Economics at the University of Guelph.

New Faces



Dr. Tomas Nilsson has been appointed as an Assistant Professor in the department effective July 1, 2005. Dr. Nilsson has a PhD in Agricultural Economics from Purdue University, West Lafayette, Indiana and a MSc in Agriculture from the Swedish University of Agricultural Sciences, Uppsala, Sweden. Tomas Nilsson's research interest is in the economics of the food supply chain in Canada, Europe and

the United States, in a stable-to-table focus with an international flavour, which reflects his training in areas of management, marketing and microeconomics at one American and two Swedish universities.

Tomas Nilsson's projects have included developing risk management strategies for co-operatives, the economics of certification in the red meat supply and consumer preferences for food labelling. A list of ongoing or near-term starting research projects include: (a) the economics of branding in retailing; (b) food safety in the Canadian red meat supply chain; (c) the Kyoto Protocol and emission quota trading; (d) risk management strategies for small-grain Canadian agribusinesses; (e) market structure in the Canadian poultry and egg industries; and (f) cluster analysis of Alberta's agriculture and food manufacturing industries.



Dr. Chokri Dridi has been appointed as an Assistant Professor in the department effective July 1, 2005. His primary areas of research are environmental and resource economics, industrial organization, mathematical economics and regional and urban economics. Chokri received his PhD in Agricultural and Consumer Economics from the University of Illinois at Urbana-Champaign in 2005, where he is currently

Affiliate Research Assistant Professor in the Regional Economics Applications Laboratory. After a Bachelor in Economics, and advanced studies in Mathematical Economics and Econometrics in Tunisia, he was awarded a one-year Fulbright fellowship to study water markets at the University of Illinois. Before his current appointment, Chokri joined the department as a Research Associate in January 2005. His current research interests focus on technology adoption, political economy and principal-agent models in resource economics, industrial cluster analysis, and computational models and simulations in economics.



Dr. Cindy Jardine has been appointed as an Assistant Professor in the department effective July 1, 2005. Cindy comes to the department after spending three years in the Department of Human Ecology, where she held an Alberta Heritage Foundation for Medical Research (AHFMR) Population Health Research Investigator award. Cindy has a PhD in Medical Sciences (Public Health Sciences - Environmental Health), an MSc in Environmental Science/Engineering (both from the University of Alberta), and an Honours BSc in Zoology from the University of Manitoba.

Cindy Jardine had a diverse career in various areas of environmental and health management. Her research interests focus on environmental health risk communication, risk perception and risk assessment. Dr. Jardine's current research activities include investigating the risk communication lessons learned from the SARS outbreak in Toronto in 2003, and how these lessons apply to various stakeholders in Alberta (including the public, health professionals and members of the travel industry) (funded by AHFMR). She is also heading a large-scale study looking at the risk perspectives and risk communication needs of northern Canadian Aboriginal communities (funded by Health Canada). In addition, Dr. Jardine has recently been awarded two research grants from the Social Sciences and Humanities Research Council (SSHRC) to examine the potential for public participation in risk management decisions under conditions of scientific uncertainty and to examine healing from violence in northern Aboriginal families.

Graduate Student Highlights



Ross Mitchell, PhD, received his degree in Rural Sociology in 2005. His thesis is titled "Ecological Democracy and Forest-Dependent Communities of Oaxaca, Mexico."

Abstract: In chapter 2, a conceptual definition of ecological democracy is proposed, with four illustrative scenarios. Two empirical examples from Mexico - one focused on industrial pollution and the other on community forestry - are then compared. In Chapter 3, forest management, forest trade, and local democracy are examined in selected Mexican forest-based communities. Common-pool resource regimes are explicitly linked to an historical context of intertwined social and political relations. The thesis tested is whether collective decision-making within common property forest systems is feasible in the face of mounting pressures for land privatization and trade liberalization. Mexico was selected for this study for its many successful common forestry arrangements. Key themes of democracy, forest trade, and socio-environmental wellbeing help assess whether social, historical, and other processes are responsible for the successes achieved to date. In Chapter 4, two guiding questions are whether local political mobilization occurs in response to changes in forest management regimes, and whether indigenous forms of forest management illustrate ecological democracy. Two forest

communities selected for comparison in the Sierra Norte in Oaxaca, Mexico have taken different forest use paths: the former has opted for community-based forest management, whereas the latter has taken an anti-logging approach and struggled with its neighbours on a shared landbase for almost 50 years. Four key themes of ecological democracy - local governance, equitable decision-making, forest management, and environmental awareness - are described and discussed in relation to the two communities. In summary, this research found that achieving ecological democracy through an indigenous community forest model is both possible and, in certain cases, preferable to other alternatives. It also brings new insight into the meaning of democratic decision-making and environmental management.

Ross is currently working as a Resource Sociologist, Alberta Research Council, Edmonton, Alberta.



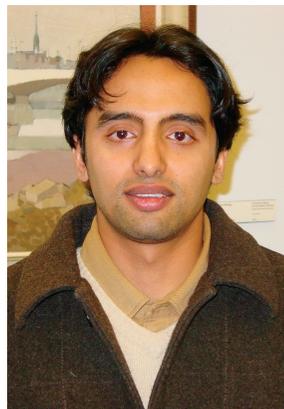
Gloria Gao, MSc, received her degree in Agricultural and Resource Economics in 2005. Her thesis is titled "Consumer Behaviour: Who Seeks Information About Genetically Modified Food?"

Abstract: The paper reports on a sample of consumers' voluntary search for information on genetically modified (GM) foods. In the course of a computer-based survey on consumer choices of bread, some

445 respondents are randomly assigned to different information scenarios, which involve voluntary access to information (this is accessed through a "mouse click"). The "mouse click" data show that slightly less than 50% of the respondents actually sought the information made available on GM technology and related issues, while the remainder did not.

The economic benefit-cost structure is adopted as the theoretical basis for our study. As well non-economic factors are introduced as constructs that may influence information search. The findings of this study should contribute to a better understanding of why some people search for information on GM food and provide information that may aid understanding of effective risk communication to consumers and public policy makers.

Gloria is currently working as senior Research Assistant, Faculty of Nursing, University of Alberta



Anish Neupane, MSc, received his degree in Agricultural and Resource Economics in 2005. His thesis is titled "Assessing Recreation Values at Risk from Wildfires in Alberta."

Abstract: This study outlines the importance of including outdoor recreation values in forest fire management in Alberta. Rather than assume that existing recreation infrastructures reflect recreation values, we propose

an alternative valuation framework based on econometric models of recreation participation. The results indicate that recreation values are not necessarily tied to the availability of recreation infrastructures. The high value recreation sites are located in southern Alberta particularly along the Mountain and the East Slopes Regions. The implications of this spatial distribution of recreation activity on current fire management framework are analyzed and policy recommendations made.

Anish is currently working as an Environmental and Resource Economist, Jacques Whitford Consulting, Halifax, Nova Scotia.

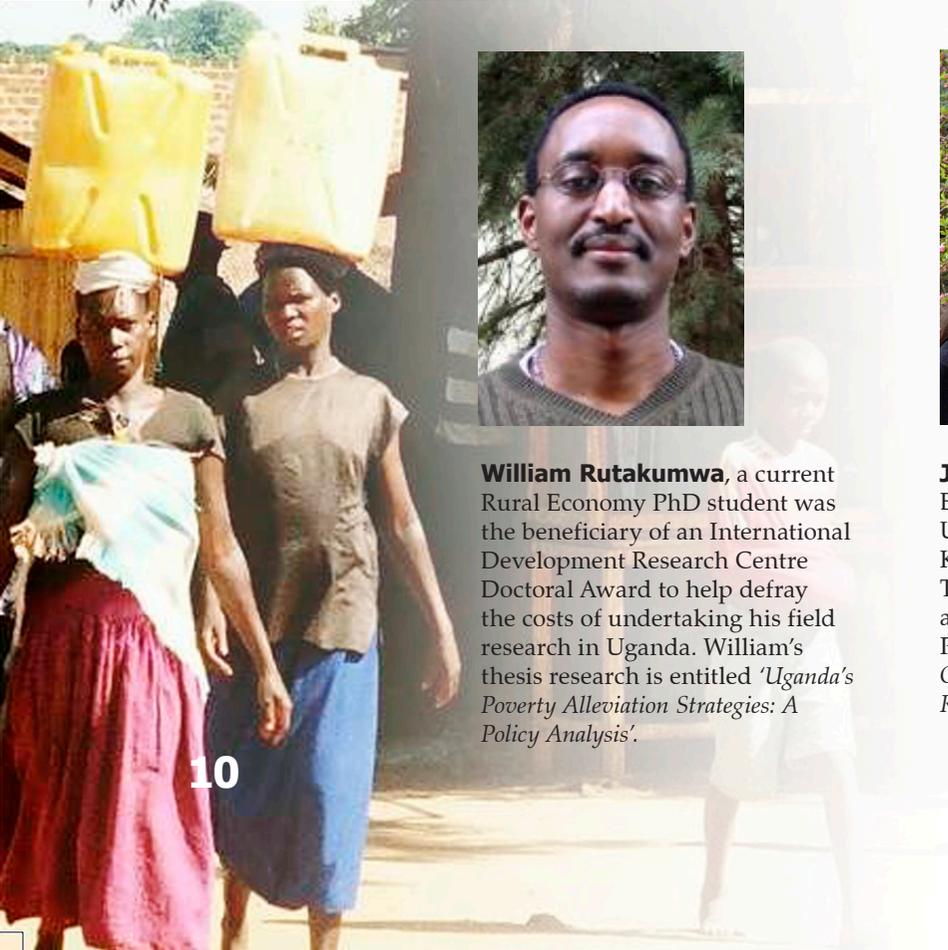
Graduate Student



Rural Economy students received Social Sciences Humanities Research Council (SSHRC) awards in 2005.

Jay Anderson received a SSHRC "Doctoral Fellowship." Jay's forestry related thesis research is entitled '*Economics of priority-use zoning*'.

Chris Arnot received a SSHRC "Masters' Fellowship." Chris is conducting research on forest tenures in Canada.



William Rutakumwa, a current Rural Economy PhD student was the beneficiary of an International Development Research Centre Doctoral Award to help defray the costs of undertaking his field research in Uganda. William's thesis research is entitled '*Uganda's Poverty Alleviation Strategies: A Policy Analysis*'.



Jing Zhang, a current Rural Economy PhD student received a University of Alberta "Izaak Walton Killam Memorial Scholarship." The award recognizes academic and scholarly achievements. Jing's PhD thesis research is on '*Valuing Community Drinking Water: Health Risk Reductions*'.



Awards

received in 2005 include:

Anderson, Jay

- Canadian Forest Service Graduate Supplement
- SSHRC Doctoral Fellowship
- Walter H. Johns Graduate Fellowship
- West Fraser Scholarship in Enhanced Forest Management

Arnot, Christopher

- SSHRC Master's Fellowship
- Walter H. Johns Graduate Fellowship

Belanger, Clotilde

- John Proskie Memorial Scholarship
- McBain Scholarship

Cortus, Brett

- Province of Alberta Graduate Scholarship
- J. Gordin Kaplan Graduate Student Award
- Douglas McRorie Memorial Scholarship

Danso, George

- Provost Doctoral Entrance Award
- Co-operative Chair Studentship in Agricultural Marketing and Business

Deng, Yu

- J. Gordin Kaplan Graduate Student Award

Ding, Yulian

- Provost Doctoral Entrance Award

Emunu, John Paul

- J. Gordin Kaplan Graduate Student Award

Fernando, Jeewani

- Provost Doctoral Entrance Award

Geda, Tsedale

- Syngenta Graduate Scholarship
- T.W. Manning Book Prize

Glover, Freda

- Murray and Pauline Hawkins Research Bursary

Hu, Wanjing

- FS Chia PhD Scholarship

Hu, Wuyang

- William Applebaum Memorial Scholarship for an Outstanding PhD Dissertation
- Canadian Agricultural Economics Society Runner-up PhD Thesis Award

Huang, Wenzhao

- Provost Doctoral Entrance Award
- John Proskie Memorial Scholarship
- McBain Scholarship
- J. Gordin Kaplan Graduate Student Award

Iniguez, Christian

- Provost Doctoral Entrance Award

John, Gabriel

- J. Gordin Kaplan Graduate Student Award

Johnson, Trina

- Province of Alberta Graduate Scholarship
- Douglas McRorie Memorial Scholarship

Laidlaw, Victoria

- Province of Alberta Graduate Scholarship

Lawrence, Lola

- Mary Louise Imrie Graduate Student Award

Li, Yu

- J. Gordin Kaplan Graduate Student Award

McCarney, Geoffrey

- Province of Alberta Graduate Scholarship
- J. Gordin Kaplan Graduate Student Award
- Margaret (Peg) Brown Award
- T.W. Manning Book Prize

Neumann, Pamela

- Province of Alberta Graduate Scholarship
- Murray and Pauline Hawkins Research Bursary

Olmos, Santiago

- Provost Doctoral Entrance Award
- Prairie Adaptation Research Collaborative Graduate Scholarship

Parker, Leanna

- Mary Louise Imrie Graduate Student Award
- Walter H. Johns Graduate Fellowship

Politylo, Jason

- Western Agricultural Economics Association Outstanding Master's Thesis Award

Rausch, Michael

- J. Gordin Kaplan Graduate Student Award
- Province of Alberta Graduate Scholarship

Robertson, Susan

- Provost Doctoral Entrance Award

Rutakumwa, William

- J. Gordin Kaplan Graduate Student Award
- Province of Alberta Graduate Scholarship
- IDRC Doctoral Research Award

Spyce, Amanda

- Province of Alberta Graduate Scholarship

Stewart, Bryce

- J. Gordin Kaplan Graduate Student Award
- Province of Alberta Graduate Scholarship
- Alberta Agricultural Economics Association Master's Scholarship Award
- MacAllister Scholarship in Agriculture

Tao, Shiyi

- J. Gordin Kaplan Graduate Student Award

Yang, Jun

- J. Gordin Kaplan Graduate Student Award

Zhang, Jing

- Izaak Walton Killam Memorial Scholarship

Undergraduate



(L to R): Brian Markert, Lynne Draganiuk, Tomas Nilsson, Miranda Baniulis, James Benkie



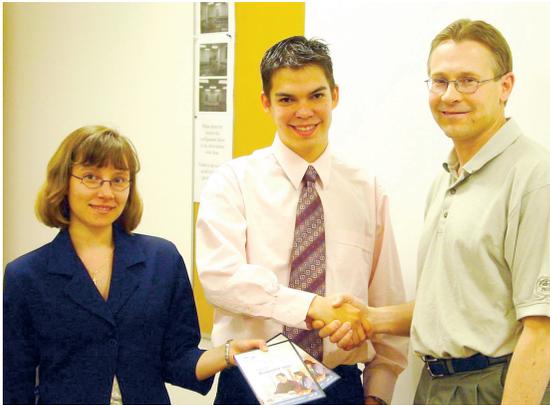
A team of undergraduate students, **Miranda Baniulis**, **James Benkie**, **Lynne Draganiuk** and **Brian Markert** from Agribusiness and Agriculture and Resource Economics placed second in the *Sixth Annual Food Distribution Society Undergraduate Case Study Competition* in Washington, DC, October 15-16, 2005. **Tomas Nilsson** provided key input to the team in their presentations.



Amanda Dacyk, was awarded the Undergraduate Book Prize given to an outstanding undergraduate student in agricultural economics, farm management or a closely related field of study at the *Canadian Agricultural Economics Society Meetings* in San Francisco, California, July 6-8, 2005. Amanda is a 4th year student in the BSc Environmental and Conservation Science, majoring in Environmental Economics and Policy.



Student Awards



(L to R): Lynne Draganiuk, Curtis Boyd, Wally Wrubleski

On April 22, 2005, agriculture students from the Department of Rural Economy, University of Alberta received cash prizes from **Wally Wrubleski, Farm Credit Canada (FCC)** for developing the top business plans in their class.

As part of the FCC Business Planning Awards for 2005, **Curtis Boyd** and **Lynne Draganiuk** won the top prize of \$1,500 for their commercial lambing and finishing operation. Their in-depth business plan evaluated a proposal to take a small lambing operation to a larger combined breeding and finishing operation. The team of **Glen Doll, Alesha Hill, Danielle King** and **Callum Sears** was awarded \$500 for their value-added beef processing plant business plan. A number of interesting product innovations were proposed, together with innovative ideas for generating funds.

Miranda Baniulis and **Greg Nichiporik** were awarded a prize from the Department of Rural Economy for their business plan that proposed the formation of an innovative beef producing cooperative. Their plan pointed to ways of avoiding the typical life cycle conflicts that many other cooperatives are facing.



(L to R): Glen Doll, Danielle King, Wally Wrubleski, Alesha Hill, Callum Sears



(L to R): Amanda Neall, André Asselin

Undergraduate students participated in the *Undergraduate Section Paper Competition* at the 2005 American Agricultural Economics Association Meetings held in Providence, Rhode Island, July 24-27.

André Asselin received first place for his paper titled: "Eggcentric Behaviour - Consumer Characteristics that Demonstrate Greater Willingness to Pay for Functionality."

Amanda Neall received second place for her paper titled: "Do Health Consciousness and Health Behaviour Affect Egg Consumption? The Case of the Edmonton Consumer."

Distinguished Academic Staff Awards



Dr. Vic Adamowicz has been awarded the J. Gordin Kaplan Award for Excellence in Research. It is the most prestigious University of Alberta research award. Vic received the award to laud outstanding work and research excellence in the area of Social Sciences.

Vic is often described as one of the world's top environmental and resource economists. His work includes examining the cost to

make such environmental changes by increasing pollution control or the cost of increased forest harvesting. But the even more challenging number to calculate in those examples would be the benefits of improved air quality or of enhanced forest recreation experiences – figures which are not usually priced in markets and need extra work to decipher.

By developing ways to combine different data sources to get more reliable measures, Adamowicz and his colleagues have become pioneers in this area, a field called environmental benefit valuation, and his work is now cited often in related literature and used throughout the world.

In the United States, for example, there is a policy framework that requires parties who damage the environment to compensate the public. Adamowicz's techniques are included in the suite of tools used to calculate those compensation amounts and have been applied in several compensation cases.

"What makes me happy is that these techniques are now being used in other disciplines such as health economics or transportation research," Adamowicz said.

Vic was formally recognized at a ceremony and reception held March 8, 2005, organized by the Office of the Vice-President (Research) where he gave a presentation titled: "Values, Economics and the Environment." He will automatically become a member of the Academy of Kaplan Laureates.

More Academic Staff Awards

- Vic Adamowicz, Canadian Agricultural Economics Society, "President-Elect."
- Sean Cash, Scott Jeffrey and Jim Unterschultz, AFHE "Teaching of the Year Award."

Dr. Peter Boxall has received a University of Alberta 2005-2006 Killam Annual Professor Award which recognizes outstanding contributions to scholarship and to the University community. Peter engages students in course material with classroom experiments. To say Dr. Peter Boxall's research interests are diverse would be somewhat of an understatement. From fair trade coffee on campus to female hunters in Alberta, the Killam professor will tackle it - using his novel research methods along the way.



Peter has also been called upon frequently to provide technical advice to federal and provincial governments, as well as industry and non-governmental organizations. His counsel has ranged from the environmental and health impacts of climate change to the recreation values of Ontario parks. The breadth of his committee work is also staggering and has varied in scope from the review of senior citizen's angling licenses to sustainable forest management.

Peter has received grants to study the consumer demand for eggs, the relationship between air quality and forest fires and to learn what people are willing to pay for a marine protected area in the Gulf of St. Lawrence, to name a few. He is an editor of the Canadian Journal of Agricultural Economics and is a referee for more than 25 journals.

But despite his prolific publication record (he has authored more than 100 articles, reports, book chapters and conference presentations) and demands away from the university, Peter says one of the things he is most proud of is being a professor.

"It's a dream job," says Boxall, who also received the McCalla Research Professorship in 2004.

"I love teaching. The class is full of people who want to save the environment and I'm helping opening their minds to issues - I find that inspiring," he says. "A lot of them remind me of me as an undergraduate."

For Peter, receiving the Killam Annual Professorship is a welcomed honour.

"What makes this an interesting and prestigious award is it doesn't represent just one aspect of your research portfolio," he said. "It means a lot to be recognized for so many different aspects of your work."

Overview of the Cooperative Program in Agricultural Marketing and Business



The Cooperative Program in Agricultural Marketing and Business was created by industry funding in the late 1980's. The broad purposes of the program are to conduct research, extension and teaching in the areas of agricultural marketing and business. The focus is on issues related to group activities whether these be for cooperatives or other organizations.

The program funding is largely used to fund graduate student research. Currently there are three Masters students and two PhD students funded through the program. Their research topics vary from: Efficiency in Agricultural Marketing Co-operatives to Strategic Marketing Games Played by Processors and Retailers to Factors Affecting the Demand for Eggs in Canada.

Students working in the cooperative program were well represented in various national and international professional meetings throughout the year.

The program also encourages various extension activities. This year the highlight of the program was the Annual Symposium 2005 "What Do Consumers Really Want?" was held on June 1, 2005, at the University of Alberta. Consumer demand for food continues to be one of the most complex factors affecting agribusiness. New research tools are allowing us to determine what consumers will purchase in the future and why certain foods are less than popular. Symposium 2005 provided us with an opportunity to examine consumer demand for a variety of foods and product attributes. Invited speakers from the U.S. included Randy Westgren (University of Illinois) who spoke on U.S. and Canadian consumer's attitudes towards functional foods and Leigh Maynard (University of Kentucky) who spoke on how important it

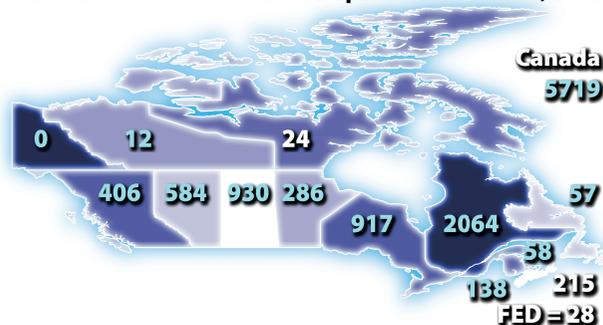
The broad purposes of the program are to conduct research, extension and teaching in the areas of agricultural marketing and business.



(L to R): Oyebola Jegede, Jeevani Fernando, Wenzhao Huang, John Paul Emunu

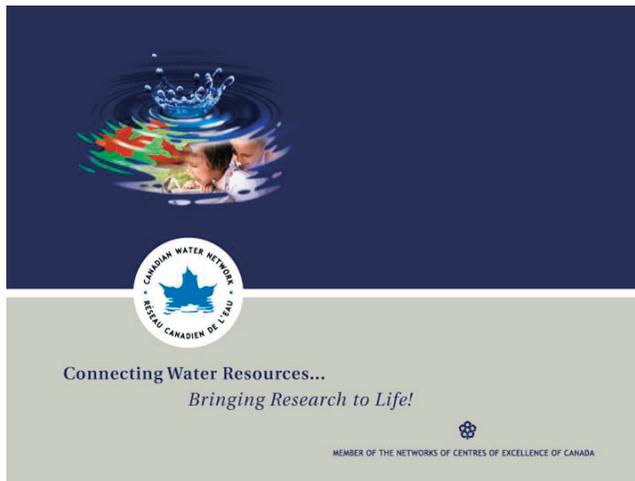
is to look at consumer demand at the brand rather than commodity level. Rural Economy professors spoke on a variety of topics: Ellen Goddard spoke on the impact of agricultural policies on food choices and on consumer preferences for eggs by production attribute (health, organic, animal friendly), Sean Cash spoke on the merits of 'fat' taxes versus thin subsidies, Tomas Nilsson spoke on credence attributes for pork chops in the U.S. Jill Hobbs, University of Saskatchewan, provided two presentations; one on the implications of the adoption of trans-fat free Nexera canola and health care costs; the second on traceability in the Canadian food chain. Graduate student research in the Department of Rural Economy was highlighted through the presence of research posters. The symposium was well attended with approximately 100 people in attendance.

Distribution of Non-financial Co-operatives in Canada, 2002



Canada Research Chair *in* Environmental Economics

Vic Adamowicz holds the Canada Research Chair in Environmental Economics. One of the major themes of his research program over this past year has been the economic value of improved environmental quality and health risk reductions - focusing on the value of drinking water quality improvements and air quality improvements.



The Walkerton, Ontario tragedy in May 2000, which resulted in several deaths and many illnesses from E. coli in drinking water, triggered many concerns about drinking water quality in Canada. While the focus of these concerns was on microbial illnesses like E. coli, other concerns, including those around the byproducts of chlorine treatment methods, also arose. In traditional economic analysis of environmental health risks, like mortality risks from microbial diseases, the type of mortality risk is assumed to not affect the economic value of the risk. However, for some of these health risks the context of the risk is quite different. This led Adamowicz and his colleagues to investigate the impact of the type of risk, microbial illness versus cancer, on the economic

value of health risk reduction. Is the value of mortality risk reduction different for different health contexts? This type of information is important for policy design if policy interventions are aimed at reducing different types of risks.

Adamowicz and his colleagues Diane Dupont (Brock University) and Alan Krupnick (Resources for the Future, Washington DC) obtained research funding from Health Canada, the Canadian Water Network and the U.S. Environmental Protection Agency to investigate the effect of risk context on economic value. The project included Canada wide surveys that collected information on expenditures on bottled water, water filters and other water related purchases. The surveys also elicited Canadian's values for risk reductions in different risk contexts. The main focus was on differences in value of cancer risk reductions versus microbial risk reductions. The results suggest, somewhat contrary to the existing literature, that cancer mortality risk reductions have lower values than microbial mortality risk reductions.

The other aspect of this research was that it investigated changes in the public provision of water treatment services. That is, the risk reductions were evaluated in the context of treatments that would affect a community rather than an individual. This approach provides for the investigation of altruism within the value of risk reductions. A PhD student working with Adamowicz, Jing Zhang, is examining this issue in her dissertation research. The preliminary results suggest that altruistic value may be a significant portion of the value of health risk reductions in water treatment.

The connections between environmental quality and human health risks are at the forefront of many environmental policy discussions at this time. These include issues around air quality, water quality, climate change and other linkages between health and the environment. The economic analysis of these linkages will help identify where policy interventions are most effective and help us understand the economic value of environmental goods and services.

