RURAL ECONOMY

1999 Annual Report



Department of Rural Economy Faculty of Agriculture, Forestry, and Home Economics University of Alberta Edmonton, Alberta, Canada

DEPARTMENT OF RURAL ECONOMY

1999 ANNUAL REPORT

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Rural Economy in 1999: Building for the Future

The mission of the Department of Rural Economy of the University of Alberta is to pursue excellence in the discovery, application and dissemination of knowledge of economic, sociological, and business dimensions of agriculture, food, forestry and the environment.

Rural Economy was fortunate to be able to build on its faculty and support staff resources in 1999. The process of staffing renewal is expected to continue through 2000. This will give us the basis for a comprehensive review of the courses and departmentally-based programs that support the department's mission during the next year. Future review will include assessment of courses associated with Rural Economy's graduate programs as well as the department's course-based contributions to the undergraduate programs of the Faculty of Agriculture, Forestry and Home Economics. Currently Rural Economy courses are important to the Faculty's BSc programs in: Agriculture; Agricultural/Food Business Management; Environmental and Conservation Sciences; Forestry, and Forest Business Management. One focus of Rural Economy faculty renewal is in Rural Sociology.

Dr. Debra Davidson, Rural Sociologist, was appointed to a joint ACCESS-funded position in two departments--Rural Economy and Renewable Resources--during 1999. She will contribute to teaching and graduate supervision in both departments. Her areas of specialization include the state and environmental policy; globalization; and native studies issues. She joins Dr. Naomi Krogman as Rural Economy's second continuing rural sociologist. Recently appointed adjunct professors supporting the Rural Sociology program include Dr. Bonnie McFarlane, Forest Social Scientist with the Canadian Forest Service and Dr. Frank Tough, Director of the School of Native Studies. Dr. Tom Beckley's appointment as adjunct professor (Rural Sociology) also supports this program and Dr. Wayne Lamble (Extension Education) is a longstanding adjunct professor in Rural Economy. The renewal in Rural Sociology faculty resources provides an excellent basis for course and program assessment and development in this specialization in the forthcoming year.

Renewal in faculty resources that builds on the capabilities of Rural Economy is occurring in other areas of specialization in the department. Dr. Peter Boxall, formerly of the Canadian Forest Service, was appointed as a Rural Economy faculty member in 1999. His research and teaching focuses on resource, environmental and forest economics. His is also a new faculty position, built on the support provided by Rural Economy toward programs of the Network of Centres of Excellence in Sustainable Forest Management. A third faculty appointment in Rural Economy was made in the area of Agribusiness Management. Desmond Ng will take up this position in 2000, upon his completion of the PhD program in Agribusiness Management at the University of Illinois. His appointment will replace Dr. Frank Novak who has moved to private industry. During the year Dr. Harvey Brooks, who had held the Cooperative Chair in Marketing and Agribusiness for the previous four years, resigned to take up a position in industry. A replacement appointee for the Cooperative Chair program in Marketing and Agribusiness are being undertaken in the interim with continuation of research projects and the associated Cooperative Chair Graduate Fellowship program.

Absent from Rural Economy on sabbatical leave during all or part of 1999 were Dr. Martin Luckert, who pursued sabbatical research activities at the University of Zimbabwe, and Dr. Scott Jeffrey, who is undertaking sabbatical research at the University of Guelph. Rural Economy hosted two sabbatical visitors during 1999/2000. Dr. Mario Carrier, Directeur, Chaire Desjardins en dðveloppement des petites collectivitðs, Universitð du Quðbec en Abitibi-Tðmiscamingue, was a Visiting Professor for one year from July 1999, working on a study of rural governance during this period. Dr. Jeffrey Englin of the Department of Applied Economics and Statistics, University of Reno, was also a sabbatical Visiting Professor, undertaking research on forest economics during the past year, sponsored through the Canadian Forest Service. Three Chinese Visiting Scholars, Huiming Lu, Hengyun Ma and Lian Xu, on leave from their home institutions in order to study aspects of Canadian agricultural economics, were in the Department of Rural Economy during all or part of 1999. In other staffing changes, Mr. Jim Copeland continued to be seconded to a University of Alberta central unit managing the introduction of new administrative computing-based information services and Mr. Randy Page joined Rural Economy's support staff, to support both the department's local area network and all other computing facilities and services of the Department. Rural Economy continues to be fortunate to have support from a small group of dedicated and experienced support staff. Their

names, and those of other continuing members of the department, are listed elsewhere in this report.

The infrastructural support for Rural Economy's mission was strengthened during the previous year. Continued improvement of research computing facilities for graduate students and associates was achieved. The Eric Berg Reading Room, a comprehensive research-oriented collection of published and unpublished materials pertaining to the Department's specialist areas of agricultural and resource economics, rural sociology and forest economics, was also built up in areas pertaining to agroforestry and environmental issues. The endowment fund to support the acquisition of the Reading Room research collection is now half-way to reaching its target. Our thanks to all the friends of the department who have contributed to this endowment and to the Rural Economy endowment fund to support graduate assistance. The generosity of donors is also evident in new scholarship opportunities for both graduate and undergraduate students in agricultural and resource economics and agri-food business management. In particular, the Alberta Agricultural Economics Association has endowed a \$1,000 scholarship for agricultural economics graduate students; an endowment to support an award of \$500 for an undergraduate student in agricultural economics has also been provided by this association. These scholarships come into play in 2000. This is also the case for an undergraduate award to a student in the agricultural/food business management program. This new award is funded by the recent gift from the committee that organized the XIth International Farm Management Congress and from previous donations to Rural Economy (including donations honouring the memory of Hubert and Jenny Copeland), as well as other departmental resources. Thanks are expressed to all donors. Their generous support to Rural Economy's endowments has enhanced the quality of education and research.

The research undertaken by academic staff also continues to be a major means of funding to support graduate students and research infrastructure in Rural Economy. Research revenues achieved by Rural Economy faculty members exceeded \$1.9 million during the most recent 12-month period, providing research support for many graduate students. The previous review of Rural Economy's graduate programs by the University of Alberta, through the Faculty of Graduate Studies and Research, showed that the opportunity for some graduate students to undertake thesis research in an international context is a highly valued aspect of graduate study opportunities in Rural Economy. Opportunities for graduate students to undertake research abroad continued to be sought in 1999 and these enabled six Rural Economy graduate students, three of whom are Canadian, to undertake thesis research in an international context during the year.

The strategic planning process undertaken in Rural Economy in 1999 led to the development of the mission statement which is stated above. This will guide department operations during the next year and beyond. The renewal and strengthening of resources and infrastructure that occurred in 1999 will aid Rural Economy to pursue excellence in the discovery, application and dissemination of knowledge of economic, sociological, and business dimensions of agriculture, food, forestry and the environment.

Michele Veeman Chair

> Colleagues and friends were saddened by the death of Emeritus Professor Dr. Steve Love in late 1999. A short obituary is given in this annual report.

Academic Staff

Academic Staff

Wiktor L. Adamowicz, PhD (Minnesota); Professor; Environmental Economics, Econometrics, Forest Economics.

- Peter C. Boxall, PhD (Alberta); Associate Professor; Environmental Economics, Resource & Forest Economics (as of October 1999).
- Harvey G. Brooks, PhD (Iowa State); Associate Professor; Co-operative Chair in Agriculture, Marketing and Business (until July 1999).
- Kevin Z. Chen, PhD (Guelph); Assistant Professor; Agricultural Marketing, Policy.
- James H. Copeland, MSc (Alberta); Faculty Service Officer; Computing and Statistical Analysis (on secondment until June 30, 2000).
- Debra J. Davidson, PhD (Wisconsin-Madison); Assistant Professor; The State and Environmental Policy, Globalization, First Nations Issues (as of October 1, 1999).
- Grant K. Hauer, PhD (Minnesota); Assistant Professor; Resources & Environmental Economics, Trade.
- M. Shahidul Islam, PhD (Oregon); Visiting Assistant Professor; Agricultural Production Economics/Management (until June 30, 1999).
- Scott R. Jeffrey, PhD (Minnesota); Associate Professor; Agricultural Business Management, Production Economics. Graduate Coordinator (on sabbatical leave from July 1, 1999).
- Naomi T. Krogman, PhD (Colorado State); Assistant Professor; Sociology of Natural Resources, International Development, Gender.
- Mel L. Lerohl, PhD (Michigan State); Professor and Acting Chair; Agricultural Policy and Trade.
- Martin K. Luckert, PhD (British Columbia); Professor; Forest Economics, Natural Resource Economics (on sabbatical leave until December 31, 1999).
- Frank S. Novak, PhD (Illinois); Associate Professor; Finance, Production Economics (until July 1, 1999).
- Jim R. Unterschultz, PhD (Alberta); Assistant Professor; Marketing, Finance.

Michele M. Veeman, PhD (California at Berkeley); Professor and Chair; Marketing, Policy, Trade.

Terry S. Veeman, PhD (California at Berkeley); Professor; International Development, Resource Economics. Joint appointment with Economics.

Associated Academic Staff

Leonard P. Apedaile, PhD (Iowa State); Professor Emeritus; Agricultural Policy, Rural Development. Len Bauer, PhD (Oregon State); Professor Emeritus; Agricultural Management, Production Economics. Tom M. Beckley, PhD (Wisconsin); Adjunct Professor; Forest Sociology. Dhara S. Gill, PhD (Cornell); Professor Emeritus; Rural Sociology, Agricultural Extension. Murray H. Hawkins, PhD (Ohio State); Professor Emeritus; Marketing, Business Management. G. Wayne Lamble, PhD (Texas A & M); Adjunct Professor (Faculty of Extension); Extension Education. Benoit Laplante, PhD (Queens); Adjunct Professor (World Bank); Environmental Economics. B.L. McFarlane, PhD (Alberta); Adjunct Professor; Forest Social Science. Glen A. Mumey, PhD (Washington); Adjunct Professor (Faculty of Business); Finance, Management. Eloise C. Murray, PhD (Pennsylvania State); Professor Emeritus; Gender Issues, Extension, Int'l. Development. Brian T. Oleson, PhD (Minnesota); Adjunct Professor (Canadian Wheat Board); Marketing, Trade. T. Alf Petersen, PhD (Washington State); Professor Emeritus; Farm Management, Extension. W.E. Phillips, PhD (California at Berkeley); Professor Emeritus; Forest Economics, Resource Economics. Joseph J. Richter, Dr. Rer. Pol. (Graz, Austria); Professor Emeritus; Marketing, Trade. Wolfgang M. Schultz, PhD (Oklahoma State); Professor Emeritus; Production and Natural Resource Economics. Frank J. Tough, PhD (York); Adjunct Professor; Aboriginal Natural Resource Management. Ed W. Tyrchniewicz, PhD (Purdue); Professor Emeritus; Policy, Transportation, International Development. William A. White, PhD (Simon Fraser): Adjunct Professor (Canadian Forest Service): Forest Economics.

Support Staff

Judy Boucher, Administrative Assistant Liz Bruce, Student Services Coordinator Randy Page, LAN Administrator Marilou Stegmeier, Department Administrator Dawn Zrobok, Reading Room Supervisor

Associated Academic Staff

Shiferaw Adilu, Sessional Lecturer Glen Armstrong, Research Associate Bob Burden, Sessional Lecturer Atakelty Hailu, Post Doctoral Research Fellow Michel Haener, Research Associate M. Shahidul Islam, Sessional Lecturer Arlene Kwasniak, Sessional Lecturer Gordon Lee, Sessional Lecturer Bruce Macnab, Sessional Lecturer David Nanang, Sessional Lecturer Fiona Salkie, Research Associate Jeji Varghese, Research Associate

Obituary - Harold C. Love, 1911-1999

Harold C. Love, known as "HC" or Steve to his many friends, died suddenly in Edmonton, after a short illness. Professor Love received a BSc in 1933 and an MSc in Agricultural Economics in 1952 from Kansas State University. In 1956 he received the PhD in Agricultural Economics from Iowa State University. He was on staff at Kansas State University for several years and was Chairman of the Department of Agricultural Economics, University of Houston, from 1957 until 1962. Dr. Love joined the Department of Rural Economy, University of Alberta, as Professor of Agricultural Economics in 1962. He retired in 1976. As a disciple of Earl Heady, Dr. Love had a special interest in production economics and farm management. He was very active in retirement, enjoying golf, outdoor and farming interests until his death on November 20. He is survived by his wife, Martha, their three children and families.

Awards to Undergraduate Students in 1999

Ilene Gellings - Agricultural/Food Business Management Scholarship

Marnie Wilks - (Undergraduate) McRorie Scholarship in Agriculture

Awards to Graduate Students in 1999

Chanchoura Bouphasiri - BJ McBain Scholarship

Phillip Carswell - Graduate Studies and Research Scholarship

- Cyril Chami African Economic Research Consortium (AERC) Scholarship - M.H. Hawkins Graduate Research Scholarship
- Chen Chen Graduate Studies and Research Scholarship
- Saqib Durrani Graduate Studies and Research Scholarship
- Mohamed Gheblawi Libyan Secretariat of Higher Education Scholarship - Rogers Sugar Ltd. Scholarship
- Heather-Anne Grant BJ McBain Scholarship

Rajendra Gurung - Graduate Studies and Research Scholarship

Larry Hegan - CBIE Scholarship

Wuyang Hu - FS Chia PhD Scholarship

- Graduate Studies Research Scholarship
- Tanya Hunt Graduate Studies and Research Scholarship
- Innocent Karamagi African Economic Research Consortium (AERC) Scholarship - Graduate Studies Research Scholarship
- Murad Ali Khan Graduate Studies Research Scholarship
- Renee Boyoung Kim Japanese Government (Monbusho) Scholarship - Canadian Wheat Board Fellowship
- Roy Larsen Graduate Studies and Research Scholarship
- Xiaozhan (Jean) Liu FS Chia PhD Scholarship
- Jody Mackenzie University of Alberta Graduate Student Teaching Award
- Diane McCann Graduate Studies and Research Scholarship
- Jamie Miller John Proskie Memorial Scholarship - Graduate Studies Research Scholarship
- Neelum Miraj Canadian Commonwealth Scholarship
- Sibongile Moyo Fund for the Support of International Development Activities (FSIDA)
- Gordon Murray Graduate Studies and Research Scholarship
- David Nanang FS Chia PhD Scholarship
- Sheraz Nasir Graduate Studies and Research Scholarship
- Mike Patriquin Province of Alberta Graduate Scholarship - AAEA Master's Scholarship
- Kwamena Quagrainie Canadian Wheat Board Graduate Fellowship
- William Rutakumwa Fund for the Support of International Development Activities (FSIDA)
- Natalia Rylska Graduate Studies Research Scholarship
- Satoshi Tamai Graduate Studies and Research Scholarship
- Richard Vyn Graduate Studies and Research Scholarship

Awards to Staff in 1999

- Wiktor Adamowicz Faculty of Agriculture, Forestry and Home Economics Teaching Wall of Fame Award. Weldwood of Canada Award for the outstanding presentation at the Canadian Woodlands Forum (with P. Boxall).
- Peter Boxall Weldwood of Canada Award for the outstanding presentation at the Canadian Woodlands Fourm (with W. Adamowicz).
- Scott Jeffrey Faculty of Agriculture, Forestry and Home Economics Teaching Wall of Fame Award.
- Naomi Krogman NACTA Teaching Award, Faculty Nomination. Faculty of Agriculture, Forestry and Home Economics Teaching Wall of Fame Award.

Professional Offices Held by Staff in 1999

- Wiktor Adamowicz Member of Editorial Board for the Journal of Agricultural and Resource Economics; Member of Editorial Council for the Journal of Environmental Economics and Management; Member, Canadian Agricultural Economics Society Executive.
- Peter Boxall Associate Editor for Economics, International Journal of Wildland Fire. Co-Chair of the Society and Stewardship Section for the Millenial Conference on Sustainable Forestry.
- Debra Davidson Member, Forest Care External Stakeholders Group, Alberta Forest Products Association.
- Scott Jeffrey Member, Advisory Council, Western Canadian Dairy Seminar. Member, Provincial Coordinating and Advising Group (PCAG) for the Canada-Alberta Farm Business Management Program.
- Naomi Krogman Editor, Natural Resources Research Group Newsletter, Rural Sociological Society. Associate Editor, Society and Natural Resources. Chair, Natural Resources Research Group, Rural Sociological Society.
- Martin Luckert Member, Institute of Environmental Studies, Academic Board, and Board of Management.
- Jim Unterschultz Executive Committee, Alberta Agricultural Economics Association. Alberta Representative, Western Agricultural Economics Association. Chair, Board of Directors of the Western Food Conference.
- Michele Veeman Member, Advisory Committee on Agricultural Statistics to Statistics Canada; Member, Policy, Economics and Marketing Research Advisory Committee of Alberta Agriculture. Member, Research Steering Committee of Canadian Agri-food Marketing Council. Member, Editorial Committee of Estey Journal of Law and Economics. Member, Board of the National Centre for Food and Agricultural Policy.
- Terrence Veeman Director, International Association of Agricultural Economists Canadian Chapter, and IAAE representative on the Executive of the Canadian Agricultural Economics Society. Director, Canadian Water Resources Association - Alberta Branch. Member, Advisory Committee, Environmental Research and Studies Centre, University of Alberta. Member, Board of Examiners, Alberta Institute of Agrologists.

Staff on Leave in 1999

Jim Copeland, April 1, 1999 to May 31, 2000.

Scott Jeffrey, July 1, 1999 to June 30, 2000.

Marty Luckert, January 1, 1999 to December 31, 1999.

Graduate Students Completing Programs in 1999, their Thesis Topics and Supervisors

Boxall, Peter. Explorations of the Use of Random Utility Models in Nonmarket Benefit Estimation. Ph.D. (Adamowicz)

Chase, Darren. Course-Based MBA/MAg. (Unterschultz)

- den Otter, Michael. The Evolution of Policy and Adaptive Management in the Foothills Model Forest. M.Sc. (Luckert/Krogman)
- Duan, Yufeng. Ex-Post Competitiveness Assessment of Alberta Agri-Food Exports in Target Products and Markets: 1988-96. (Chen)

Hansen, Donald. Course-Based MBA/MAg. (Lerohl)

Jagger, Pamela. An Economic Analysis of Afforestation in Rural Zimbabwe. M.Sc. (Luckert)

Le, Theresa. Asian Consumer's Store Choice for Fresh Pork in San Francisco California. M.Sc. (Chen/ M. Veeman)

Lyster, Norman. The Canadian Feed Pea Market. M.Sc. (Lerohl)

Mdluli, Funekile. Inkhomo Yinsila Yemaswati: Cattle Ownership, History, Culture, and the Environmental Question of Swazi Nation Land. PhD. (Decore)

Odupong, Ernest. A Model Framework for BST Impact Assessment on the Alberta Dairy Industry. M.Ag. (Jeffrey)

Robinson, Chad. Course-Based MBA/MAg. (Lerohl)

Taylor, Cameron. Individual Time Preference in Forest Management. M.Sc. (Luckert/Adamowicz)

Witwicki, Nicole. Analysis of the Determinants of Success in Agricultural Marketing and Production Clubs. M.Sc. (Krogman/Brooks)

Graduate Students Commencing and Continuing Programs Through 1999

Chanchoura Bouphasiri, MSc (Veeman, T.) Peter Cahill, MSc (Adamowicz) Sylvie Cauvier-Lepine, MSc (Murray) Cyril Chami, PhD (Adamowicz, Veeman, T.) Chen Chen, PhD (Chen/Veeman, M.) Crescentia Dakubo, PhD (Boxall/Veeman,T.) Donna Dosman, PhD (Adamowicz/Murray) Armstrong Duku-Kaakyire, MSc (Unterschultz) Saqib Durrani, MBA/MAg (Lerohl) Lorraine Dzuda, MSc (Hauer) Nanako Furuyama, MSc (Krogman) Paul Gervais, MBA/MAg (Lerohl) Mohamed Gheblawi, PhD (Adamowicz) Heather-Anne Grant, MSc (Veeman, M./Jeffrey) Rajendra Gurung, MSc (Brooks) Young Wook Han, MSc (Veeman, T./Lerohl) Larry Hegan, MSc (Luckert) Wuyang Hu, PhD (Jeffrey) Tanya Hunt, MSc (Hauer) Innocent Karamagi, PhD (Jeffrey) Ali Murad Khan, MSc (Chen) Renee Kim, PhD (Veeman, M./Unterschultz) Godfrey Kundhlande, PhD (Luckert/Adamowicz) Roy Larsen, MSc (Hauer/Boxall) Dawn Marie Latam, MBA/MAg (Lerohl) Wai Mei Lee, MSc (Unterschultz) Xiaozhan Liu, PhD (Veeman, T./Chen)

Heather Jean MacKenzie, MBA/MAg (Lerohl) Jody MacKenzie, MSc (Krogman) Diane McCann, MSc (Veeman, M.) Jamie Miller, MSc (Unterschultz) Neelum Miraj, PhD (Veeman, T.) Clotilde Mollo Ngomba, MSc (Hauer) Patience Sibongile Moyo, MSc (Veeman, M./Jeffrey) Gordon Murray, MSc (Veeman, T./Boxall/Hauer) David Nanang, PhD (Luckert/Hauer) Sheraz Nasir, MSc (Veeman, T) Randeep Nota, MBA/MAg (Veeman, M.) Mike Patriquin, MSc (Adamowicz) Angela Pearson, MSc (Veeman, T.) Michael Pierce, MBA/MAg (Lerohl) Tracey Poitras-Collins, MSc (Krogman) Kwamena Quagrainie, PhD (Unterschultz/Veeman, M.) Natalia Rilska, MBA/MAg (Lerohl) William Rutakumwa, MSc (Krogman) Julius Salegio, MSc (Krogman) Bradford Shapansky, MSc (Adamowicz) Andrew Spratt, MSc (Unterschultz) Satoshi Tamai, MSc (Hauer) Richard Vyn, MSc (Hauer) Tim Williamson, PhD (Adamowicz/Hauer) Yue Zhao, PhD (Jeffrey/Chen) Christopher Zindi, PhD (Luckert/Jeffrey)

Visiting Professors/Scholars

Carrier, Mario, Visiting Professor, Universito du Quobec: Sabbatical leave from July 1999 to July 2000.

Englin, Jeff. Visiting Professor, University of Nevada: Sabbatical leave from July 1999 to July 2000.

Lu, Huiming, Senior Researcher, Institute of Scientific and Technical Information of Jilin Province, PRC. February

1998 to February 1999.

- Ma, Hengyun, PhD Candidate, Center for Chinese Agricultural Policy, Chinese Academy of Agricultural Sciences, Beijing, PRC. August 1998 to August 1999.
- Xu, Lian, Associate Professor, Huaxia Township Enterprise College, Zhejiang Agricultural University, Hangzhou, Zhejiang, PRC. January 1998 to December 1999.

Visiting Speakers and their Topics

- Boxall, Peter. Economist, Canadian Forest Service, Northern Forestry Centre. Understanding Heterogeneous Preferences in Random Utility Models: The Use of Latent Class Analysis. April 22.
- Brooks, Harvey. Co-operative Chair, University of Alberta. Farmer Market Segmentation Issues and Strategies for Agricultural Co-operatives and Group Marketing Institutions. June 11.
- Davidson, Debra. Post Doctoral Research Associate, Department of Rural Sociology, University of Wisconsin-Madison. Federal Policy in Local Context: The Influence of Local State-Societal Relations on Endangered Species Act Implementation. July 30.
- den Otter, Michael. MSc Graduate in Rural Sociology. An Analysis of Adaptive Management in the Development of Three Protected Areas in the Foothills Model Forest. November 24.
- Haener, Michel. Forest Research Economist, Canadian Forest Service, Natural Resources Canada. *Regional Forest Resource Accounting: Incorporation of Fire and Price Risk*. May 17.
- Hailu, Atakelty, Post Doctoral Fellow, University of Alberta. *Parametric and Nonparametric Approaches to Environmentally Sensitive Productivity Analysis*. April 6.
- Hanemann, Michael. Professor, Department of Agricultural and Resource Economics, University of California-Berkeley. *Willingness to Pay vs Willingness to Accept: Revisiting the Controversy*. March 12.
- Hesseln, Hayley. Assistant Professor, School of Forestry, University of Montana. *Optimization of Fire Management Activities: Development of a Catastrophe Theory Model*. April 1.
- Jagger, Pamela. Research Analyst, Environment and Production Technology Division, International Food Policy Research Institute. *An Economic Analysis of Rural Afforestation in Northeastern Zimbabwe*. August 6.
- LeRoy, Danny. Department of Economics, University of Lethbridge. *The Effects of Trade Liberalization on the Canadian Dairy Industry*. November 30.
- Lyster, Norman. MSc Candidate, Department of Rural Economy. Assessing the Pea Futures Contract. March 29.
- Mehta, Michael. Assistant Professor, School of Policy Studies, Queen's University. *Developing an Equity-Based Global Climate Policy from an Integrated Assessment Perspective*. June 14.
- Ng, Desmond. National Soybean Research Laboratory. *Cognitive Dissonance in the Swine Value Chain*. November 15.
- Robbins, Linda. Senior Market Analyst, Food Bureau, Market and Industry Services Branch, Agriculture Canada. *The New Canadian Consumer - Focus on Alberta Consumers with Comparisons to Canada and Other Countries.* March 23.
- Shaikh, Sabina. Assistant Professor, Faculty of Agricultural Sciences, University of British Columbia. *Theoretical and Empirical Results of a Time and Money Constrained Recreation Demand Model: The Case of*

California Gray Whale Watching. December 6.

- Schilizzi, Steven. Department of Agricultural & Resource Economics, The University of Western Australia. Deciding Between Economic Development and Nature Preservation: A Way Out of the Impasse? February 19.
- Stefanick, Lorna. Visiting Assistant Professor, Department of Political Science, University of Alberta. Local communities and Land Management: Obstacles to Reaching Consensus. June 23.
- Vercammen, Jim. Associate Professor, Agricultural Economics & Commerce and Business Administration, University of British Columbia. *Contracting in Vertical Agri-Food Markets: Implications for Market Development and New Generation Co-operatives*. December 20.

A Major Academic Activity: Rural Economy Participation in Sustainable Forest Management - The Network of Centres of Excellence

The Sustainable Forest Management Network, one of Canada's 18 Networks of Centres of Excellence, is centred at the University of Alberta, but national in scope. This is a national research network focused on management of the boreal forest, involving university, industry and government collaboration in research. The Faculty of Agriculture, Forestry and Home Economics plays a major role in this NCE. Several faculty members are partners in the Network. Dr. Vic Adamowicz (Rural Economy) became Project Leader of the Network in late 1998. Dr. Terry Veeman (Economics/Rural Economy) is a co-theme leader of one of the three themes (Strategies and Institutions for Sustainable Forest Management). In addition four faculty members have graduate students funded through the network.

The Sustainable Forest Management NCE is core funded by two federal granting councils: The Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC), in collaboration with Industry Canada. The Network is also supported by several industry partners, provincial governments, and First Nations partners. The Network's annual budget for research and networking is now over \$5 million. The Network has been extended to the year 2002.

The Network examines new approaches to forest management that can maintain the nation's forest basedeconomy while not compromising biodiversity and ecological goals. The Network has three theme or legacy areas: Ecological Basis of Sustainability, Strategies and Institutions for SFM, and Minimum Impact Technologies. The theme areas interact to provide linkages between ecology, forest practices, processing and pollution control technology and social and economic development that are necessary to develop new approaches to forestry and new forest policies.

International Projects

Agroforestry Southern Africa Project

M. Luckert, U of A Director

This five year project is funded by the Canadian International Development Agency. It is providing for a continuation of many of the collaborative activities involving a variety of collaborative activities of the University of Alberta and the University of Zimbabwe that were initiated through the earlier Value of Trees Project. In 1999 four Rural Economy faculty members (Grant Hauer, Michele Veeman, Terry Veeman and Marty Luckert) participated in a field research training program on the uses, values and markets for bark products that are used for commercialized crafts and medicinals by Zimbabwe villagers. Graduate studies of four Zimbabwe students continued to be supported under this program in Rural Economy in 1999. These are Godfrey Kundhlande, Chris Zindi, Sibongile Moyo and Lorraine Dzuda.

CATIE/University of Alberta/UniversitJ Laval Trilateral Agroforestry Project

This faculty-based project has provided opportunities for graduate student research in Agroforestry. The project was extended through December 1999, when it was completed successfully. In 1999 Rural Economy graduate student Julius Salegio completed field-level research in El Salvador for the MSc in Rural

Sociology through this project.

Update on Rural Economy Facilities

The Rural Economy Reading Room continues to be a valuable resource for the department. The collection includes 19,000 monographs, 141 current journals and magazines, 3 newspapers, 13 U.S. Department of Agriculture serial statistical publications, and 32 Statistics Canada serial publications. The scope of the collection has expanded in the last few years beyond the traditional areas of agricultural economics, forest economics and rural sociology to include agroforestry and environmental economics.

The Rural Economy Graduate Computing Laboratory is a 10 work station research facility. All machines run Win95, and the applications which are available include: MS Office 97, SHAZAM, LIMDEP, SPSS, GAUSS, and GAMS. Selected general purpose applications such as Telnet, FTP, Netscape/ie, Acrobat Reader and others are also installed. The machines themselves are a mix of various pentium classes. On-site support is available from Randy Page.

1999 Publications

Refereed Publications (Journal Articles, Books and Chapters in Books)

- Adamowicz, W.L., P.C. Boxall, J.J. Louviere, J. Swait, and M. Williams. 1999. Stated Preference Methods for Valuing Environmental Amenities. In: Bateman, I.J. and K.G. Willis (editors), Valuing Environmental Preferences: Theory and Practice of the Contingent Valuation Method in the U.S., E.C. and Developing Countries. Oxford University Press, New York. p. 460-482.
- Akabua, K.M., W.L. Adamowicz, W.E. Phillips, P. Trelawny. 1999. Implications of Realization Uncertainty on Random Utility Models: The Case of Lottery Rationed Hunting. *Canadian Journal of Agricultural Economics* 47:165-179.
- Alavalapati, J. and W. Adamowicz. 1999. Economic Importance of Forestry-related Sectors in the Provincial and Northwestern Regional Economy of Alberta. *Forestry Chronicle*. January/February 75(1):111-119.
- Alavalapati, J.R., W.L. Adamowicz, and W. White. 1999. Distributive Impacts of Forest Policies in Alberta. Forest Science. 45(3):342-348.
- Alavalapati, J.R., W.L. Adamowicz and W.A. White. 1999. Random Variables in Forest Policy: A Systematic Sensitivity Analysis using CGE Models. *Journal of Forest Economics* 5(2):321-355.
- Armstrong, G., S. Cumming and W. Adamowicz. 1999. Timber Supply Implications of Natural Disturbance Management. *The Forestry Chronicle* 75 (3):497-504.
- Chen, K. and H. Brooks. State Trading and Non-Price Discriminatory Trade: The Case of Japan's Wheat Imports. *Agribusiness: An International Journal* 15(1999):41-51.
- Chen, K. Z., H.J. Guo, and P. Chen. Does China Price Discriminate Across Origins of Wheat Imports? In: Food Security, Diversification and Resource Management: Refocusing the Role of Agriculture? G. H. Peters and J. Von Braun (editors). Ashgate Publishing Limited, England. p. 464-472.
- Hauer, G. and C. Ford Runge. Trade-Environment Linkages in the Resolution of Transboundary Externalities. *The World Economy* 22(1):25-39.
- Hauer, G. and C. Ford Runge. Resolving Transboundary Pollution Externalities by Linkage to Trade. Canadian

Journal of Agricultural Economics 45(4):393-402.

- Janzen, R.A., W.B. McGill, J.J. Leonard and S.R. Jeffrey. Manure as a Resource Ecological and Economic Considerations in Balance. *Transactions of the AEAE* 42(5):1261-73.
- Krogman, N. Bureaucratic Slippage in Organizations Responsible for Protecting the Environment: The Case of Wetland Regulations. *Research in Social Problems and Public Policy* 7:163-181.
- Kuperis, P., M.M. Veeman and W.L. Adamowicz. 1999. Consumer Responses to the Potential Use of Bovine Somatotrophin in Canadian Dairy Production. *Canadian Journal of Agricultural Economics* 47:151-163.
- Luckert. M.K. Are Community Forests the Key to Sustainable Forest Management?: Some Economic Considerations. *Forestry Chronicle* 75(5):789-792.
- Luckert, M.K. Stumpage Fee Collection Systems on Public Forest Lands in Canada: An Overview. In: Economic Rents and Environmental Management in Mining and Natural Resource Sectors. Eugenio Figueroa B, editor. Centre-Universidad de Chile, Santiago. p. 317-332.
- Treseder, L. and N.T. Krogman. Features of First Nation Forest Management Institutions and Implications for Sustainability. *Forestry Chronicle* 75(5):793-798.
- Veeman, M. and T. Veeman. Canadian Wheat Board. *The Canadian Encyclopedia*. (James H. Marsh, editor), McClelland & Stewart Inc. p. 386.
- Veeman, M. and T. Veeman. Agriculture and Food. *The Canadian Encyclopedia*. (James H. Marsh, editor), McClelland & Stewart, Inc. p. 36-38.
- Veeman, M., M. Fulton and B. Larue. International Trade in Agricultural and Food Products: The Role of State Trading Enterprises. Agriculture and Agri-Food Canada, Economic and Policy Analysis Directorate Publication 1998E. Released April 1999. 108 pp. + App.
- Veeman, T.S. and A. Hailu. Environmentally Sensitive Productivity Analysis of the Canadian Pulp and Paper Industry, 1959-1994: An Input Distance Function Approach. *Journal of Environmental Economics and Management*. In press.
- Veeman, T.S., D.W. Smith, B. Purdy, F. Salkie and G. Larkin, Editors. Science and Practice: Sustaining the Boreal Forest. Proceedings of the 1999 Sustainable Forest Management Network Conference. SFM Network, Edmonton. 816 p.

Oral Presentations, Posters, Proceedings and Abstracts and Other Items

- Adamowicz, W. "The Sustainable Forest Management Network." Presented at the Finnish Forest Research Institute, Helsinki, August.
- Adamowicz, W.L. "Sustainable Forest Management and the SFM Network." In: Proceedings of the 1999 Sustainable Forest Management Network Conference. Science and Practice: Sustaining the Boreal Forest. T.S. Veeman, D.W. Smith, B.G. Purdy, F.J. Salkie and G.A. Larkins (editors). Sustainable Forest Management Network, Edmonton. pp. 1-2.
- Adamowicz, W. "Research Issues on Integrated Resource Management." Presented at the Sustainable Forest Management Network/Canadian Forest Service Workshop on Forest Economics. October 1.
- Adamowicz, W.L., P.C. Boxall, M. Williams and J. Louviere. "Stated Preference Approaches for Measuring Passive Use Values: An Application to Woodland Caribou Conservation in Alberta, Canada." In: The Living

Forest: Non-Market Benefits of Forests, Proceedings of the International Symposium on the Non-Market Benefits of Forestry. C. Stewart Roper and A. Park (editors). The Stationary Office and the Forestry Commission, London. pp. 83-90.

- Alavalapati, Janaki R.R., W.L. Adamowicz, and W.A. White. "Regional Economic Impact Analysis: Flight from Jurassic Park." In: Science and Practice: Sustaining the Boreal Forest. T.S. Veeman, D.W. Smith, B.G. Purdy, F.J. Salkie, and G.A. Larkin (editors). Sustainable Forest Management Network, University of Alberta, Edmonton. pp. 363-368.
- Armstrong, G.W., W.L. Adamowicz, G. Hauer and S. Cumming. "Implications of a Market for Carbon on Timber and Non-Timber Values: Joint Production of Timber, Carbon, and Wildlife Habitat in an Uncertain World." Paper presented at the Canadian Resource and Environmental Economics Meeting, Edmonton, Alberta. October 2-3.
- Armstrong, G.W., J.A. Beck, Jr., W.L. Adamowicz, and F.K.A. Schmiegelow. "Towards the Desired Future Forest: A Goal-Programming Approach" (extended abstract). In: Proceedings of the 1999 Sustainable Forest Management Network Conference. Science and Practice: Sustaining the Boreal Forest. T.S. Veeman, D.W. Smith, B.G. Purdy, F.J. Salkie, and G.A. Larkin (editors). Sustainable Forest Management Network. Edmonton. pp. 228-231.
- Armstrong, G.W., S.G. Cumming, and W.L. Adamowicz. "Timber Supply Implications of Natural Disturbance Management" (extended abstract). In: Proceedings of the 1999 Sustainable Forest Management Network Conference. Science and Practice: Sustaining the Boreal Forest. T.S. Veeman, D.W. Smith, B.G. Purdy, F.J. Salkie, and G.A. Larkin (editors). Sustainable Forest Management Network. Edmonton. pp. 369-374.
- Beckley, T.M., P.C. Boxall, L.K. Just, and A.M. Wellstead. Forest Stakeholder Attitudes and Values: Selected Social-Science Contributions. Information Report NOR-X-362, Northern Forestry Centre, Canadian Forest Service, Edmonton, Alberta. 24 pp.
- Beckley, T.M., P.C. Boxall, L.K. Just, and A.M. Wellstead. Annotated Bibliography of Social Science Research on Forest Stakeholders' Attitudes and Values. Information Report NOR-X-365, Northern Forestry Centre, Canadian Forest Service, Edmonton, Alberta. 33 pp.
- Boxall, P. and J. Englin. "An Empirical Examination of Fire Damage on Forest Amenities: A Combined Revealed-Stated Preference Model." Presented at the Symposium on Fire Economics, Planning, and Policy: Bottom Lines, San Diego, California. April 5-9.
- Boxall, P. "Understanding Heterogeneous Preferences in Random Utility Models: The Use of Latent Class Analysis." Presented at the Research Triangle Institute, North Carolina, March 5.
- Boxall, P. "Forests are More than Timber: Non-timber Valuation Research and its Implication for Future Forest Management." Presented at the School of Resource and Environmental Management, Simon Fraser University, February 8.
- Boxall, P.C., J. Englin, and D.O. Watson. An Empirical Examination of Non-Market Values of Wilderness Recreation and their Role in the Industrial Use of a Canadian Forest. In: The Living Forest: Non-Market Benefits of Forests, Proceedings of the International Symposium on the Non-Market Benefits of Forestry. C. Stewart Roper and A. Park (editors). The Stationary Office and The Forestry Commission, London. pp. 145-152.
- Boxall, P.C., J. Englin and D.O. Watson. Valuing Backcountry Recreation in Wilderness Parks: A Demand Systems Approach in the Canadian Shield. Information Report NOR-X-361. Northern Forestry Centre, Canadian Forest Service, Edmonton, Alberta. 23 pp.

- Chen, K. and Y. Duan. Competitiveness of Canadian Agri-food Exports against its Competitors in Asia: 1980-97. Joint Series of Competitiveness, Number 18, Centre for International Business Studies (CIBS), Faculty of Business, University of Alberta. 18 p.
- Chen, K. and Y. Duan. *Competitiveness of Alberta Agri-food Exports in Target Markets*. Final report submitted to Alberta Agriculture. 66 p.
- Chen, K.Z., L. Xu, and Y. Duan. Export Competitiveness of China's Agri-food Exports. In: China's Role in World Food Markets. Proceedings of WCC-101 Wahl and Carter (editors). San Diego, California, p. 149-163.
- Davidson, D.J. The Hazards of Simplicity. Presented at the American Sociological Association Annual meetings, Chicago. August.
- Davidson, D.J. Media Discourse and the Public Sphere. Presented at the Rural Sociological Society Annual meetings, Chicago. August.
- Davidson, D.J. Biodiversity and the Local State. Presented at the International Sociological Association Annual Meetings Chicago. August.
- Davidson, D.J. The Impact of Federal Policy on Rural Communities. Presented at the Rural Sociological Society Annual meetings, Chicago. August.
- Duwors, E., M. Villeneuve, F. Filion, R. Reid, P. Bouchard, D. Legg, P. Boxall, T. Williamson, A. Bath, and S. Meis. The importance of Nature to Canadians: Survey Highlights. Minister of Public Works and Government Services Canada, Ottawa, Ontario. 50 pp.
- Haener, M., P. Boxall and W. Adamowicz. "Modeling Recreation Site Choice: Do Hypothetical Choices Reflect Actual Behavior?" Presented at the University of Helsinki. August.
- Haener, M., and W.L. Adamowicz. "Regional Forest Resource Accounting: A Northern Alberta Case Study" (extended abstract). In: Proceedings of the 1999 Sustainable Forest Management Network Conference. Science and Practice: Sustaining the Boreal Forest. T.S. Veeman, D.W. Smith, B.G. Purdy, F.J. Salkie, and G.A. Larkin (editors). Sustainable Forest Management Network. Edmonton. p. 375-380.
- Hauer, G.K. Pollution Emissions, Income and Pollution Dispersion: Empirical Evidence. Seminar Presentation at the Department of Economics, McMaster University. February 26.
- Hauer, G.K. Forest Management Modelling. Invited presentation at the Joint SFM-CFS Forest Economics Research Workshop. Edmonton, Alberta. October 1.
- Hauer, G.K. The Economics of Biomass Management and Utilization. A Presentation on the Economics Component of the BIOCAP National Centre of Excellence Proposal on Biosphere Carbon Management in Canada. Invited presentation at "Biological Approaches to Cleaner Production in Canada: A Policy Symposium", National Research Council, Ottawa, Ontario, November 22.
- Hauer, G.K. and C. Ford Runge. Transboundary Pollution and Income: Public Goods and the Environmental Kuznet's Curve. Paper presented at the Canadian Resource and Environmental Economists Meeting, Edmonton, Alberta, October 2-3.
- Hegan, L. Are Fuelwood Resources Open-Access?: Valuing Fuelwood Collection Sites in Rural Zimbabwe Using a Site Choice Model. Invited presentation to the Swiss CIFOR workshop. Hotsprings, Zimbabwe. February.
- Jagger, P. An Economic Analysis of Afforestation in Rural Zimbabwe. Invited seminar to the Department of Rural Economy, University of Alberta, Edmonton, Alberta. August.

- Jeffrey, S., K. Chen, and O. Zhao. *The Impact of Inter-provincial Trade Liberization on Canadian Dairy Production and Processing.* Final report submitted to Policy Branch, Agricultural Canada. 105 p.
- Kim, R. and K.Z. Chen. Habit Formation and Japan's Wheat Import Behavior. In: Uncertainties in Japan. Proceedings of Annual Conference on Japanese Studies, The Joint Asian Research Center, University of Toronto and York University, p. 231-239.
- Krogman, N. and L. Treseder. Forest Management and First Nations in Canada: Institutional Options for Empowerment. Presented at Rural Sociological Society meetings. Chicago, Illinois. August 4-8.
- Krogman, N. Future Directions for Public Involvement Research for Forest Management. Invited presentation at Public Participation Workshop sponsored by the Sustainable Forest Management Network, Network Centres of Excellence. Grand Prairie, Alberta. August.
- Krogman, N. and L. Treseder. First Nations and Forest Management: Challenges in Canada. Invited presentation at International Week, University of Montana, Missoula, Montana. March.
- Krogman, N. Book Review of Knowing Nature, Knowing Science for Local Environment 4(2):241.
- Krogman, N. Summary of Joint Session on Environmental Regulation, Implementation, Human Dimensions of Ecosystem Management, and Rural Communities and Environmental Justice. *Natural Resources Research Group Newsletter* Fall: 1-4.
- Lerohl, M. and J. Unterschultz. Return to Basic and Applied Research. Poster presentation at Research Revelations, University of Alberta. February.
- Luckert, M.K. Can We Be Social Engineers With Respect to Property Rights to Indigenous Natural Resources? Invited presentation to the Inter-Institutional Forum on Policy Relevant to Forestry, Policy Round Table. Harare, Zimbabwe. November.
- Luckert, M.K. Household Decisions Within a Dynamic Environment. Invited presentation to the DFID Workshop Masvingo, Zimbabwe. September.
- Luckert, M.K. and G. Kundhlande. Towards an Analytical Framework for Assessing Property Rights to Natural Resources: A Case Study in the Communal Areas of Zimbabwe. Invited presentation to CSIR Stellenbosch and the University of Stellenbosch, South Africa. Videocast to CSIR Pretoria, South Africa. August.
- Luckert, M.K. Towards a Framework for Assessing Impacts of Property Rights on Natural Resource Management. Invited presentation to the University of Western Capetown, Capetown, South Africa. August.
- Luckert, M.K., W. Adamowicz and M. Veeman. Challenges In Using Valuation Techniques Cross-Culturally. Invited presentation to CSIR, Pretoria, South Africa. August.
- Luckert, M.K. Assessing Natural Resource Issues in Communal Areas of Zimbabwe: A Microeconomics Primer. Invited presentation to the workshop, "Economic Analysis of Markets and Bark Products: A Case Study of Three Species in Eastern Zimbabwe". Harare, Zimbabwe. May.
- Luckert, M.K. Investigations into Impacts of Tenures on Household Decision Making and Welfare. Invited presentation delivered to the Swiss CIFOR workshop. Hotsprings, Zimbabwe. February.
- Luckert, M.K. Testing Land Tenure Characteristics as Incentives for Common Property Resource Management. Invited presentation to the SADC Natural Resource Management Programme. Harare, Zimbabwe. January.

- Luckert, M.K. SADC Natural Resource Management Programme. Panel Discussant on proposals for studies in Natural Resources Management. Harare, Zimbabwe. January.
- Luckert, M., W. Adamowicz and M. Veeman. "Challenges In Using Valuation Techniques Cross-Culturally." Invited presentation delivered to CSIR, Pretoria, South Africa. August.
- Luckert, M. and B. Campbell. Challenges to Proponents of Common Property Resources. Invited presentations delivered by Campbell on five occasions: 1) CIFOR (Centre for International Forestry Research) seminar, Bogor, Indonesia, March; 2) University of Stellenbosch, South Africa. August; 3) University of Port Elizabeth, South Africa. August; 4) South African Wildlife College, Kruger National Park, South Africa. August; 5) Inter-Institutional Forum on Policy Relevant to Forestry, Policy Round Table. Harare, Zimbabwe, November.
- McFarlane, B., P. Boxall and W. Adamowicz. Descriptive Analysis of Hunting Trends in Alberta. Information Report NOR-X-366. Northern Forestry Centre, Canadian Forest Service, Edmonton, Alberta. 15 pp.
- McFarlane, B.L. and P.C. Boxall. Forest Values and Management Preferences of Two Stakeholder Groups in the Foothills Model Forest. Information Report NOR-X-364. Northern Forestry Centre, Canadian Forest Service, Edmonton, Alberta. 17 pp.
- Parkins, J., B. McFarlane, P. Boxall, and T. Beckley. Sustainable Forest Management, Protected Areas, and Biodiversity: A Focus Groups Study in the Foothills Model Forest. Interim Report, Foothills Model Forest, Hinton, Alberta. 48 pp.
- Price, D., G. Hauer and T. Williamson. Fully Integrated Assessment of Climate Change Effects on Forest Systems with Non-linear Response Paths: A Canadian Study. Paper presented at the National and Regional Climate Impact Assessment in the Forestry Sector Workshop, Wenddoche, Germany. November 10-13.
- Robinson, E. and N. Krogman. Crossing Disciplinary Boundaries to Understand Framing: Theoretical Insights and Synthesis. Presented at Rural Sociological Society meetings. Chicago, Illinois. August 4-8.
- Smith, E.G., M. Lerohl, Y. Peng and F.J. Larney. Economics of Restoring Yield on Eroded Soils with Inorganic Fertilizers. In: Proceedings of Alberta Soil Science Workshop 1999. Calgary, Alberta. p. 4.
- Stewart, L., P. Woodard, K. Hirsch and N.T. Krogman. Analyzing the Fire Hazard Potential and Changing the Behavior of Strathcona County Residents in the Wildland/Uurban Interface. Poster presentation at Forest Industry Lecture Series (FILS).
- Treseder, L. and N. Krogman. First Nations and Forest Management: An Overview of Social Institutions. In: Proceedings of the 1999 Sustainable Forest Management Network Conference on Science and Practice: Sustaining the Boreal Forest. T.S. Veeman, D.W. Smith, B.G. Purdy, F.J. Salkie and G.A. Larkin (editors). University of Alberta, Sustainable Forest Management Network. p. 184-191.
- Unterschultz, J. Consumers, Beef and Biotechnology. In: Proceedings of National Beef Science Seminar: Molecular Biology in the Service of the Beef Industry. University of Alberta, Edmonton. p. 67-83.
- Veeman, M. Understanding How Markets Work: Local Markets for Resource Products. Primer for Workshop on Marketing of Resource Products. Institute for Environmental Studies, University of Zimbabwe. May. Mimeo, 23 pp.
- Veeman, M. Agriculture and Resource Policy Prospects and Challenges: A North American Perspective. Invited Plenary presentation to 43rd Annual Conference of Australian Agricultural and Resource Economics Society, Christchurch, New Zealand. January.

- Veeman, M. Consumers' Demand for Food Regulations. Invited presentation to CAES/WAEA Annual Meetings, Fargo, North Dakota. July.
- Veeman. M. Globalization and the Canadian Dairy Industry. Invited discussant at CAES 1999 Workshop on "Globalization and Agriculture." Ottawa, April.
- Veeman, M., S. Adilu and T. Veeman. Economic Impacts of Transportation Subsidy Deletion to Canadian Agriculture: CGE Analysis. Selected contributed paper presented to CAES/WAEA Annual Meetings, Fargo, North Dakota. July.
- Veeman, M., B. Larue and M. Fulton. Exporting State Trader Models: Imperfect Competition Scenarios. Invited presentation to CAES/WAEA Annual Meetings, Fargo, North Dakota. July.
- Veeman, M., B. Larue and M. Fulton. Importing State Trader Models: Price Discrimination Implications. Invited presentation to CAES/WAEA Annual Meetings, Fargo, North Dakota. July.
- Veeman, T.S. and A. Hailu. Environmentally Sensitive Analysis of Economic Performance. In: T.S. Veeman et al, Editors. Science and Practice: Sustaining the Boreal Forest. Sustainable Forest Management Network, Edmonton. p. 514-551.
- Veeman, T.S. and A.M. Pearson Macroeconomic Indicators of Sustainability for Alberta. In: T.S. Veeman et al, Editors. Science and Practice: Sustaining the Boreal Forest. Sustainable Forest Management Network, Edmonton. p. 507-513.
- Witwicki, N., H. Brooks, and N. Krogman. Analysis of Determinants of Success of Agricultural Marketing and Production Clubs. Report submitted to the Canada-Alberta Farm Business Management Program and Rural Education and Development Association.

Staff Papers and Project Reports

- Boxall, P.C. and W.L. Adamowicz. Understanding Heterogeneous Preferences in Random Utility Models: The Use of Latent Class Analysis. Staff Paper 99-02. Department of Rural Economy, University of Alberta, Edmonton. 47 p.
- Haener, M. K. and W. L. Adamowicz. *Regional Forest Resource Accounting: A Northern Alberta Case Study*. Project Report SES 2.
- Haener, M. K. and W. L. Adamowicz. *The Incorporation of Fire and Price Risk in Regional Forest Resource Accounts.* Project Report SES 3.
- Jeffrey, S.R. and F.S. Novak. *Evaluating Alternative Safety Net Programs in Alberta: A Firm-level Simulation Analysis.* Staff Paper 99-03. Department of Rural Economy, University of Alberta, Edmonton. 25 p.
- Swait, J. and W. Adamowicz. Choice Environment, Market Complexity and Consumer Behavior: A Theoretical and Empirical Approach to Incorporating Decision Complexity into Model of Consumer Choice. Staff Paper 99-04. Department of Rural Economy, University of Alberta, Edmonton. 29 p.
- Unterschultz, J.R., H. Brooks and K. Akabua. *Empirical Investigation of Flexible Pricing and Payment Alternatives* on Canadian Wheat Board Pooling for Wheat. Staff Paper 99-01. Department of Rural Economy, University of Alberta, Edmonton. 90 p.

Research Projects Completed January 1 - December 31, 1999

- Adamowicz, W., P. Kennedy, B. Laplante, M. Luckert. "Economics of Waste Management." Funded by Environment Canada.
- Brooks, H. and N. Krogman. "Analysis of Determinants of Success of Agricultural Marketing and Production Clubs." Funded by REDA Farm Business Management Initiative.
- Campbell, B., J. Gambiza, M. Luckert and B. Mukamuri. "Economics of Grazing." Funded by ECEP.
- Chen, K. "Export Competitiveness of Canadian Value-Added Food Industry in Asia." Funded by Social Sciences Research.
- Chen, K. "Competitiveness of Canadian Agri-food Exports." Funded by Western Centre for Economic Research and the Centre for International Business Studies.
- Chen, K. "Export Competitiveness of Alberta and Canadian Value-Added Food Products in Asia Pacific." Funded by Alberta Agriculture, Food and Rural Development.
- Chen, K. "Wheat Import Demand for China: Implications for Canada's Exports." Funded by SSR.
- Hauer, G. "The Role of the Canadian Natural Resources Sector in Sustainable Development: An Overlapping Generations Approach." Funded by EFF-SAS.
- Luckert, M., with B. Campbell, J Gambiza and B. Makamuri. "Economics of Grazing." Funded by Ecological Economic Network for Eastern and Southern Africa, Environment Capacity Enhancement Project.
- Novak, F.S. and J.R. Unterschultz. "Price Risk Management Strategies for the Alberta Hog Industry." University of Alberta Swine Research Endowment Trust.
- Rutakumwa, W. "Access to Health Care for Rural Ugandan Women." Funded by U of A Fund for the Support of International Development Activities.
- Smith, E. and M. Lerohl. "An Analysis of the Value of Soil Quality Attributes in Agricultural Production in Alberta." Funded by Alberta Agricultural Research Institute.
- Unterschultz, J. and F. Novak. "New Instruments for Co-ordination and Risk Sharing Within the Canadian Beef Industry." Funded by AARI.
- Unterschultz, J. and S. Jeffrey. "Value-Added 20 Billion by 2005: Impact of the Alberta Farm Gate." Funded by AARI.
- Unterschultz, J. and M. Lerohl. "A Nutriceutical Industry: Policy Implications." Funded by Alberta Agricultural Research Institute.
- Unterschultz, J. and F. Novak. "Empirical Investigation of Flexible Pricing and Payment Alternatives on Canadian Wheat Board Pooling for Wheat." Funded by Alberta Agricultural Research Institute and Canadian Wheat Board.
- Veeman, M.M. "Import Demand Estimation for Wheat: Incorporating Product Differentiation in Wheat Trade Analysis." Funded by EFF-SAS.
- Veeman, M.M. and W. Adamowicz. "Consumers' Perceptions of Environmental and Health Risks: Milk Case Study." Funded by University of Alberta Endowment Fund for the Future.

Veeman, M.M. and T.S. Veeman, "GATT Liberalization and World Grain Markets: Potential and Constraints for

Western Canada." Funded by Alberta Agriculture Research Institute - Farming for the Future.

- Veeman, T.S. "Science, Technology and Competitiveness in Alberta's Agriculture and Food Sector." Funded by Alberta Agriculture Research Institute.
- Veeman, T.S. and M.M. Veeman. "Conserving Water in Irrigated Agriculture: The Economics and Valuation of Water Rights." Funded by Canada-Alberta Environmentally Sustainable Agriculture (CAESA) Program.
- Veeman, T., W. Adamowicz, T. Horbulyk and J. Church. "Green Plan Economic Instruments for Water Resource Allocation: A Theoretical and Empirical Assessment of Pricing and Rights Trading." Funded by Environment Canada.

Research in Progress as of December 31, 1999

- Adamowicz, W. "Integrating Household/Group Preferences into Models of Choice and Environmental Valuation." Funded by SSHRC.
- Adamowicz, "Forest Use and Non-Use Values: A Research Program Proposal." Funded by Mistik Management Ltd.
- Adamowicz, W.L. "Modeling Non-timber Benefits via Benefits Transfers." Funded by Network of Centres of Excellence on Sustainable Forest Management.
- Adamowicz, W. and M. Luckert, W. White. "Assessing the Economic Impacts of a Natural Disturbance Forest Management Regime." Funded by Network of Centres of Excellence on Sustainable Forest Management.
- Beckley, T., P. Boxall and W. White. "Socio-Economic Research Program for the Foothills Model Forest." Funded by Foothills Model Forest.
- Beckley, T., E. Murray, W. White. "Sustainable Communities." Funded by Network of Centres of Excellence on Sustainable Forest Management.
- Boxall, P.B. "Examination and Explanation of Trends in Recreational Hunting in Alberta." Funded by Alberta Environmental Protection.
- Chen, K.Z. "Assessing the Chinese Markets for Alberta Livestock Products." Funded by AARI.
- Chen, K.Z. "Export Competitiveness of Canadian Agri-Food Industries Relative to its Major Competitors." Funded by AARI.
- Chen, K. "Food Demand and Consumer Behaviour in Canada: Evidence from Microdata." Funded by SSHRC.
- Chen, K. "Demand for Food-Away-from-Home by Canadian Households." Funded by Endowment for the Future: Support for the Advancement of Scholarship.
- Chen, K.Z. "Dynamics of China's Livestock Markets." Funded by Social Science.
- Chen, K.Z. "Intra-household Preferences, Food Demand, and Consumer Behaviour." Awarded from Walter Street Estate and VP Research and External Affairs.
- Chen, K.Z., M.L. Lerohl. "An Analysis of Socio-Economic and Demographic Factors Associated with Consumers' Purchase of Potato Products in Western Canada. Funded by AARI.
- Chen, K.Z. and M.L. Lerohl. "Factors Associated with Consumer Purchases of Potato Products in Western Canada." Funded by Alberta Potato Research Association.

- Chen, K.Z. and M.M. Veeman. "Where, What and How Much Food Do Canadian Consumers Purchase? Food Purchasing Patterns and Determinants." Funded by FFF-AARI.
- Davidson, D.J. "The Impact of NAFTA on Forest-dependant Communities in Canada, the US, and Mexico." SSHRC- Sponsored Junior Faculty Program.
- Hudson, R., M. Freman and N.T. Krogman. "Caribou Mountains Critical Wildlife/Habitat and Traditional Ecological Knowledge Study." Funded by SFM.
- Hauer, G.K. "Legacy 2: Optimization-based Forest Planning Tolls for Sustainable Forest Management. "Funded by SFM.
- Hauer, G.K. "Leadership in Collective Action Experiments." Funded by EFF-SAS.
- Hauer, G.K. "Socio Economic Impacts and Adaptive Responses to Climate Change: A Canadian Forest Sector Perspective." Funded by Natural Resources Canada, Canadian Forest Service.
- Hauer, G.K. and H.B. Brooks. "The Role of Leadership and Institutional Roles in Agricultural Cooperatives." Funded by AARI.
- Jeffrey, S.R. "An Economic Evaluation of Alberta crop Insurance and its Relevance in the 21st Century." Funded by FFF-AARI.
- Jeffrey, S.R. and K.Z. Chen. "Implications of International and Interprovincial Trade Liberalization and Dairy Production and Processing." Jointly funded by Alberta Agricultural Research Institute and Agriculture Canada.
- Jeffrey, S.R. "An Assessment of the Economic Impact of BST on the Alberta Dairy Sector." Funded by Alberta Agricultural Research Institute and the Alberta Milk Producers Society.
- Jeffrey, S.R. "A Dynamic Economic Analysis of Productive Efficiency in Alberta Dairy Production." Funded by Alberta Agricultural Research Institute and the Alberta Milk Producers Society.
- Krogman, N. "The Effectiveness and Potential of the Cooperative Forest Management Planning Board in the Caribou-Lower Peace Region." Funded by SFM-NCE.
- Krogman, N.T. Research funded by U of A Research Excellence Envelope.
- Krogman, N.T. "SES Theme: Caribou Mountains Critical Wildlife/Habitat Integrated Research Project." Funded by SFM-SES.
- Krogman, N.T. "Travel and Consulting Funds to Develop Sampling Frame and Gather Survey Data on Farmer Wetland Conservation Behavior Throughout Southeastern Alberta." Funded by General Research Fund, University of Alberta.
- Krogman, N.T. and T.M. Beckley. "Social Consequences of Local Ownership of Canadian Forest Procuet Mills." Funded by Social Sciences and Humanities Research Council of Canada.
- Krogman, N.T. and H.G. Brooks. "An Analysis of the Municipal and Provincial Decision Making Processes for Siting Hog Operations in Alberta, Saskatchewan and Manitoba." Funded by Canada-Alberta Hog Inudstry Development Fund and Farming for the Future, AARI.

Lerohl, M.L. "Grain-Livestock Industry Research." Funded by Alberta Agriculture.

- Lerohl, M.L. "The Impact of South American Integration on the North American Beef Market." Funded by Alberta Agricultural Research Institute, Farming for the Future Project.
- Lerohl, M.L. and J.R. Unterschultz. "Supply Chain Competency: Recipe for Cereal and Livestock Marketing in Alberta." Funded by AARI.
- Luckert, M. "Foothills Model Forest." Funded by Foothills Model Forest.
- Luckert, M. and E. Murray. "Agroforestry: Southern Africa." Funded by CIDA.
- Novak, F.S. and S.R. Jeffrey. "An Economic Analysis of Alternative Whole Farm Stabilization Programs." Funded by Alberta Agricultural Research Institute Matching Grants Program with matching funds from SSHRC Project re: NISA.
- Novak, F. and J. Unterschultz. "Price Risk Management: Strategies for the Alberta Hog Industry." Funded by Alberta Agricultural Research Institute.
- Unterschultz, J.R. and H.G. Brooks. "New Generation Cooperatives as a Model for Value Added Agricultural Processing in Alberta." Funded by AARI.
- Unterschultz, J.R., S.R. Jeffrey and S. Islam. "Economic Evaluation of Manure Management and Farm Gate Applications." Funded by Wild Rose Agricultural Producers.
- Veeman, M.M. "State Trading Enterprises: Impacts on Agricultural Trade and Forthcoming Agricultural Trade Negotiations." Funded by EFF Support for the Advancement of Scholarship.
- Veeman, M. and W. Adamowicz. "Consumer Perceptions of Environmental Risks and Demand for Food Safety." Funded by Alberta Agricultural Research Institute.
- Veeman, M.M. and J.R. Unterschultz. "Canadian Wheat Export Prospects in the Asian Noodle Market: Analysing Japanese and Korean Milling Industries." Funded by AARI.
- Veeman, M.M. and J.R. Unterschultz. "Market Potential for Pork in Selected US Markets." Funded by Federal-Provincial Market Development Council and Alberta Pork Producers Marketing Corp. and Alberta Agriculture Research Institute.
- Veeman, M.M. and T.S. Veeman. "Asian Import Demand for Albertan and Canadian Meats: Market Prospects, Influences, and Vulnerabilities." Funded by Farming for the Future, AARI.
- Veeman, T.S. "Research Contributions to Crop Improvement and Agricultural Productivity." Funded by AARI.
- Veeman, T.S. and S. Islam. "Economics of Damage Control and Pest Management for Alberta Crops." Funded by AARI.
- Veeman, T.S. and M. Luckert. "Economic Issues in Assessing Sustainable Development in Forestry." Funded by Network of Centres of Excellence on Sustainable Forest Management.

Veeman, T.S. and M.M. Veeman. "Export Markets for Canadian Grain: The Chinese Enigma." Funded by AARI.