



## Cooperative Program in Agricultural Marketing and Business

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Department of Rural Economy, University of Alberta



### From the desk of the Co-operative Chair

The Cooperative Program in Agricultural Marketing and Business was created by industry funding in the late 1980's. The organizations providing funding initially were: the Alberta Chicken Producers; Alberta Egg Producers; Alberta Hatching Egg Producers; Alberta Pork; Alberta Turkey Producers; Credit Union Central Alberta; Edmonton Co-operative Association; Federated Cooperatives Limited; Lilydale Foods; Ponoka Co-op; The Cooperators; United Farmers of Alberta; Alberta Wheat Pool; and the University of Alberta. The broad purposes of the program are to conduct research, extension and teaching in the areas of agricultural marketing and business. The program funding is largely used to fund graduate student research. Currently there are five Masters students, one PhD student and one Undergraduate student being funded through the program. Highlights of research findings for the year include the following:

- Foreign direct investment in the Canadian agribusiness sector has had an impact on domestic productivity: however, the size and type of impact differs by sector (dairy versus grain), so positive outcomes are not guaranteed.
- Canadian consumers have responded to food safety issues in the media, and to generic, brand and restaurant advertising and changed their meat consumption purchases accordingly. Given current BSE and avian flu issues in the livestock industry, marketing strategies are critical. These strategies must be adjusted in response to media coverage of disease issues.

### Student Co-op Research

- Freda Glover (M.Sc expected 2005): The role of regulatory environment on success in Canadian cooperative agribusinesses.
- Getu Hailu (Ph.D. expected 2005): Capital constraints and debt in Canadian cooperative agribusinesses.
- Adrienne Herron (B.Sc Agr. Sustainable Agriculture, 2004): Potential environmental (carbon credit) cooperatives.
- Wenzhao Huang (M.Sc Ag Econ, expected 2005): Pricing games in the Western Canadian fluid milk market (before and after the loss of the largest dairy cooperative in that region).
- José Lomeli (M.Sc expected 2004): Canadian meat demand and the impact of food safety and health concerns.
- Chris Panter (M.Sc expected 2004): Marketing strategies for individual chicken products, by cut and by further processed product.
- Cindy Wang (M.Sc expected 2004): Canadian non-alcoholic beverage demand by demographic profile.

- Jing Zhang (Ph.D resource economics expected 2008): History of the western wheat pools in 2003 and also regional demand for milk by level of fat content.



[Front Row: Getu Hailu, Freda Glover, Cindy Wang, Ellen Goddard, Jing Zhang. Back Row: José Lomeli, Adrienne Herron, Chris Panter, Wenzhao Huang.]

*Ellen Goddard, Chair*

### Symposium 2004

Risks are inherent in the agriculture/food industry. Historically risks centered around weather and markets. In more recent times the industry is facing newer risks from resource availability to changes in consumer preferences, to disease and health issues. Symposium 2004 - 'Reducing Risk, Protecting People: Implications for Health, Food, and Agribusiness' held on Wednesday June 2, 2004 at the Engineering Teaching and Learning Centre - provided an opportunity to examine risk in the context of the overall industry and individual farm or firm management.

Professor Brian Roe, Ohio State University, led off the program discussing U.S. consumer concerns about eight food production and processing technologies (antibiotics, pesticides, artificial growth hormones, genetic modification, irradiation, artificial colors/flavours, pasteurization, and preservatives). Concern is highest for pesticides and hormones, followed by concern toward antibiotics, genetic modification and irradiation.

Professor Vic Adamowicz presented preliminary results of a national survey that examines consumer perceptions of health risks from drinking water, their responses to these

health risks, and their perceptions of the actions that should be taken to address concerns about drinking water quality. More than 60% of respondents feel that drinking tap water does not pose a problem for their health. A similar percentage believes that polluters should pay the cost of ensuring a safer tap water supply.

Canadian’s views of the risks from biotechnology was the topic of Professor Michele Veeman’s presentation. Sixty-one percent of respondents to a national survey felt that water pollution due to agricultural chemical runoffs posed a very high risk to the environment while only 27% felt genetic modification of agricultural products posed a very high risk to the environment. Sixty-seven percent of respondents agreed that Canada should advance genetic modification/engineering to prevent or cure disease. Overall, the conclusion is that there is a great diversity of opinion about genetic modification.

Professor Cindy Jardine emphasized the importance of all segments of the agricultural industry developing a risk communications plan prior to encountering an actual risk situation if the impact of the situation on the industry is to be mitigated.

Professor Tim Richards, Arizona State University, discussed the impact of finances on the success of cooperatives in his two presentations – “*Agricultural Cooperatives and Risk Management: Impact on Financial Performance*” and “*Cooperative Mergers and Acquisitions: The Role of Capital Constraints*”.

Professor Jim Unterschultz’s presentation featured real life examples of both successes and failures in applying various risk models to the management of risk in complex agricultural businesses.

Getu Hailu, a member of the Cooperative Program in Agricultural Marketing and Business team, discussed the impact of differing attitudes towards risk between managers and cooperative boards of directors on the costs of debt to the cooperative.

All of the symposium presentations are available on the Coop Program website at: <http://www.coop.re.ualberta.ca>

**Symposium 2004 Participants Risk Perception Survey**

Thirty-six Symposium 2004 participants took the time to complete a short survey on risk perception. Participants were asked to rate the importance they placed on each of seven risk factors (weather risk, drinking water quality, air pollution, food borne illness risk, genetic modification of products, irradiation of food products, and antibiotics in food products) to both their personal and business life on a scale of one to five, five being most important. (See Table 1).

When participants were asked about their aversion to risk related to investing with a 50/50 chance of 100% gain or loss, men (70.8%) were more risk averse than women (66.7%). However, when the potential gain was increased to

150% of the original investment, women (50.0%) were more risk averse than the men (41.7%) were. (See Table 2).

**Table 1 Mean Importance of Various Risk Factors**

Risk	Business Life		Personal Life	
	Male	Female	Male	Female
Weather	3.58	3.25	3.17	3.50
Drinking Water	3.79	4.17	4.33	4.17
Air Pollution	3.71	4.33	1.17	4.25
Food borne Illness	3.92	4.33	4.17	4.00
Genetic Modification	3.29	3.83	2.83	3.58
Irradiation of Food	3.08	3.75	2.92	3.67
Antibiotics of Food	3.33	3.75	3.42	3.58

**Table 2 Risk Aversion of Men and Women to Investing \$20,000 for Various Gains/Losses**

50/50 Chance of Gain or Loss			Risk Averse	Not Risk Averse
<b>\$20,000 gain or \$20,000 loss</b>				
	Gender	Female	66.7%	33.3%
		Male	70.8%	29.2%
	Total		69.4%	30.6%
<b>\$30,000 gain or \$20,000 loss</b>				
	Gender	Female	50.0%	50.0%
		Male	41.7%	58.3%
	Total		44.4%	55.6%

**The Cooperative Program Welcomes Dr. Henry Dakurah**



We take pleasure in welcoming Dr. Henry Dakurah to the Cooperative Program in Agricultural Marketing & Business team. Henry completed his undergraduate degree in his native Ghana, West Africa. He then completed a M.Sc. and Ph.D. at Colorado State University after which he moved to the Netherlands to

complete a postdoc at the University of Wageningen.

Henry brings a varied experience with cooperatives to the program. Following his undergraduate degree, Henry worked with small-scale farmers’ cooperatives as a research economist with the Crops Research Institute in Ghana. He has also worked as a country risk analyst with Rabobank –

the world's leading specialist in food and agribusiness banking.

When asked why he chose Edmonton, Henry responded -- "I read about the strong research the department was involved with, plus the fact that the University of Alberta is rated as one of the best places for Postdoctoral fellows. I look forward to working in the cooperatives group and contributing to its growth."

Welcome aboard Henry.

### **Co-ops: An Alternative Business Model Built on Success Seminars**

In June 2000, the Canadian Co-operative Association (CCA) and le Conseil Canadien de la Coopération (CCC), initiated a strategic planning process, in partnership with Agriculture and Agri-Food Canada's Canadian Adaptation Rural Development (CARD) program, with the aim to identify the critical challenges for Canada's agricultural cooperatives and to map an action plan that will renew and revitalize the sector for the continued economic benefit of farmers and their communities.

The resulting action plan called for a series of 10 seminars to be held across Canada highlighting the advantages of the co-op model in the context of agri-business ventures. The purpose of these workshops was to work with the existing key players (agricultural development agents, lenders, government departments, Co-operative developers etc) to increase their awareness of the model and enhance their ability to connect producers with the model, where appropriate; thus, maximizing the effective use of human capital and resources.

The Alberta workshop, facilitated by the Rural Education and Development Association (REDA), was held November 4, 2003 in Red Deer. Featured speakers included: Richard Stringham, Alberta Institute of Agrologists; Murray Fulton Centre for the Study of Co-operatives, University of Saskatchewan; Ellen Goddard, Co-operative Program in Agricultural Marketing & Business, University of Alberta; Graham Gilchrist, Alberta Agriculture, Food and Rural Development; and Lois Grenier, Co-options Consulting. Presentation topics included: the coop model, type of agricultural coops, the new agricultural industry, new generation coops, and coop governance.

### **Alberta Egg Producers Cooperative Formed**

Back in 2002 Alberta Egg producers found themselves faced with major consolidation in different aspects of the egg industry. A desire to have a say in the future of their industry in light of the consolidation taking place provided the impetus for the formation of the Alberta Egg Producers Co-operative. One hundred six of Alberta's 168 egg producers joined the Co-op.

The purpose behind the newly formed cooperative was to become involved in egg processing. The initial response was to build their own facility. However, an initial feasibility study proved inconclusive. They turned to Jeff Orchard of

Meyers Norris Penny for advice. Orchard quickly discovered that they were on the wrong track and suggested that they explore a partnership with an existing facility.

In July, 2003, the Alberta Egg Producers Cooperative and Vanderpol's Eggs from Abbotsford B.C., formed Vanderpol's Egg Products Inc. (VELI). Located in Airdrie, the processing plant produces liquid egg products. Each company has 50 per cent ownership of the plant, with Vanderpol responsible for managing the operation. The benefits of this forward integration to the egg producers include participation in setting selling prices and the receipt of dividends. But the Cooperative wasn't content with imitating their Manitoba counterparts, who had formed a similar partnership several years before.

"The key to (the Alberta partnership) was a technology play," explains Orchard. "We are going to be developing some special eggs and these special eggs will command a higher price than table eggs, which is really helping us increase the profitability in the egg industry." The liquid yolk produced from these eggs will be used in nutraceutical products. "The Alberta government is completely behind us," adds Waldner. "They believe that the non-food use of our production is where the greatest opportunities lie."

Orchard predicts health food products using the special eggs will be ready by late spring. But the members of the Cooperative aren't sitting around waiting for results. They're already talking about options for backward integration and the possibility of interprovincial cooperation between producers, a move that is necessary for the industry. "It's very exciting," states Orchard. "We're catching the interest of quite a few people, both for our ability to establish working relationships with other partners in the industry and also for bringing new products to the industry."\*

### **Recent & Upcoming Presentations**

#### **Food Distribution Research Society Annual Meeting, October 26, 2003, Biloxi, MS. Presentations:**

J. Lomeli and E.W. Goddard "How Effective are Different Kinds of Advertising in Offsetting the Negative Effects of Food Scares and Health Concerns on Meat Demand in Canada?"

G. Hailu, S.R. Jeffrey and E.W. Goddard "Regulatory Environment and Agency Costs of Debt for Supply and Marketing Co-operative Agribusiness Firms in Canada."

Hailu, G., C. Wang, J. Lomeli and E. Goddard. "Do Consumers Really Respond to Media Coverage of Food Safety Issues? The Case of Meat in Canada." Presented at International Symposium "Food Safety: Consumer, Trade and Regulation Issues", Hanzhou, China, October 10-11, 2003.

Goddard, E. "Can Advertising and Media Health Coverage Mitigate the Consumer Effects of Food Safety Occurrences? Presented at "From the Farm Gate to the Dinner Plate" –

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\* Meyers, Norris, Penny. Mpaact on Ag December 2003.

Agricultural Institute of Canada Conference. Edmonton, AB, November 2-4, 2003.

Goddard, E. and G. Hailu. "Agribusiness Co-operatives in the West: Where Are We?" Presented at the *Co-ops: An Alternative Business Model Built on Success Seminar* sponsored by the Canadian Adaptation and Rural Development Fund, Red Deer, AB, November 4, 2003.

Richards, R., E. Goddard and K. Rice. "Electric Market Restructuring and Rural Development: Trans-border Issues for Montana and Alberta." Presented at the Association for Canadian Studies in the United States 17th Biennial Conference, Portland, OR, November 19-23, 2003.

Ellen Goddard. Fortunes of Traditional Co-operatives. Presented at Building Co-operative Futures Conference, sponsored by the Rural Education and Development Association, May 14-18, 2004 at the University of Calgary.

**American Agricultural Economics Association – 2004 August 2-4, 2004 Denver, Colorado, presentations:**

Yanning Peng, Diane McCann-Hiltz, and Ellen Goddard. "Consumer Demand for Meat in Alberta, Canada: Impact of BSE". [http://agecon.lib.umn.edu/cgi-bin/pdf\\_view.pl?paperid=14569&ftype=.pdf](http://agecon.lib.umn.edu/cgi-bin/pdf_view.pl?paperid=14569&ftype=.pdf)

Getu Hailu and Ellen Goddard. "Nutrition and Health: Structural Analysis of Egg Consumption in Canada". [http://agecon.lib.umn.edu/cgi-bin/pdf\\_view.pl?paperid=14455&ftype=.pdf](http://agecon.lib.umn.edu/cgi-bin/pdf_view.pl?paperid=14455&ftype=.pdf)

Getu Hailu, Scott R. Jeffrey, and Ellen W. Goddard. "Impact of Decision Makers Divergence in Risk Attitudes and Perceptions on Co-operative Management in Canada". [http://agecon.lib.umn.edu/cgi-bin/pdf\\_view.pl?paperid=14644&ftype=.pdf](http://agecon.lib.umn.edu/cgi-bin/pdf_view.pl?paperid=14644&ftype=.pdf)

**Northeastern Agricultural and Resource Economics Association - Canadian Agricultural Economics Society Conference, June 20-23, 2004, Halifax, Nova Scotia. Presentations:**

Glover, F. and E. Goddard. "Demand for Fats and Oils in Canada: A Comparative and Econometric Analysis of Consumer Behaviour and Preferences."

Goddard, E., S. Cash, M. Lerohl. "Integrating Food Policy and Consumer Health Behaviour: A Review and Analysis." This paper was presented as part of the principal paper session: "What's Going on in Consumer Behaviour?" organized by Ellen Goddard.

Hailu, G., E. Goddard and S. Jeffrey. "Impact of Decision Makers Divergences in Risk Attitudes and Perceptions on Co-operative Management in Canada." This paper was presented as part of the principal paper session: "What's Happening in the Co-operative Sector?" organized by Ellen Goddard.

Lomeli, J. and E. Goddard. "Pursuing Robust Estimates: Does Cross-sectional Analysis Support Previous

Evidence of the Impact of Media Information on Canadian Meat Demand?"

Mendoza, G. "The Problem of Water Availability at Mexico's Northern Border: An Analysis of the Crop Supply Response in the Rio Bravo/Rio Grande Basin."

Nam, K., E. Goddard, P. Boxall, H. Dakurah and N. Osuteye. "Environmental Cooperative Structures: The Case of Manure Disposal in Alberta."

Panter, C. and E. Goddard. "Estimating the Demand for Disaggregated Chicken Products and Parts in Canada: An Application of Scanner Data."

Wang, C. and E. Goddard. "Household Demand for Non-alcoholic Beverages in Canada."

Zhang, J. and E. Goddard. "A Pooled Cross-Sectional-Time-Series Model of Canadian Fluid Milk Consumption."

Hailu, G. and E. Goddard. "Incentives, Financial Risks, Organizational Structure and Firm Performance: Evidence from Canadian Agribusiness Co-operatives." Presented at the Annual Meeting of the Canadian Association for Studies in Co-operation at the Congress of the Social Sciences and Humanities, University of Manitoba, Winnipeg, June 3-5, 2004.

Hailu, G., E. Goddard and S. Jeffrey. 2004. "Impact of Regulatory Environments on Decision Makers' Divergence in Risk Attitudes and Perceptions in Canada." Presented at the 15th International Cooperatives Forum 2004, "Competitive Advantage of Cooperative Networks", Muenster, Germany, September 7-9, 2004.

**Completed Thesis Defences**

Jorge Mendez Manzanilla. MSc. in Agricultural and Resource Economics, December 19, 2003. "Foreign Direct Investment in the Canadian Agri-food Industry". Currently, Management Orienteer, Cargill Foods.

Benjamin Nicholas Shank. MSc in Agricultural and Resource Economics, "Pricing Games in Poultry Markets: The Cases of Eggs in Australia and Chicken in Canada"

Xiachao Qian. MSc. in Agricultural and Resource Economics, "Impact of World Trade Policies on the Canadian Poultry Market"