

Canadian Agricultural Economics Society (CAES) | Société canadienne d'agroéconomie (SCAÉ)

## 15th Annual Agri-Food Policy Conference

Agricultural Policy Challenges in an Era of Instability

23-24 January, 2025

Infinity Convention Centre Ottawa, Ontario

caes-scae.ca





## **Welcome** Bienvenue

Welcome to the 15th edition of the Canadian Agri-Food Policy Conference of the Canadian Agricultural Economics Society! We are excited to have you join us as we discuss, contemplate, and analyze the most pressing issues facing the Canadian agricultural sector in 2025. For the last fifteen years, our annual policy conference has served as one of the most important national forums for discussing Canadian agriculture with policymakers, academic experts, members of non-governmental organizations and industry. The diversity in our stakeholders requires constant communication and collaboration, and we are privileged to provide the venue and the means for these conversations to take place.

The theme of our conference this year is "Agricultural Policy Challenges in an Era of Instability." The evidence of instability is monumental, spanning changes in leadership of our own country and that of our most important trading partners, threats of tariffs and non-trade barriers, near-daily reminders of the catastrophic impacts of climate change, and the uneasy notion that the agricultural sector will face unending calls to do more with less. We have met some of these challenges before, but others are new. All are troubling, all have the potential to disrupt the equilibrium in a sector that is critical for human survival. Over the next two days, we will discuss these critical issues in a way that will help us better understand how agricultural policy will have to change to suit our new reality.

On Thursday we will have our first keynote address followed by a series of thought-provoking panels discussing trade, risk management, food prices, and supply-chain resilience. Each session will provide the opportunity to hear from leading experts followed by a Q & A session in which we encourage all of our attendees to be involved. Between sessions we will provide refreshments, lunch, and plenty of opportunity to collaborate and network. On Thursday evening we invite you to join us for a reception and our annual graduate research poster competition, in which graduate students from throughout Canada will display and discuss their research.

Friday morning will feature another keynote address, followed by a panel discussion on sources of agricultural instability. We will also hear from the finalists of the graduate research poster competition, followed by an announcement of the winner from our panel of judges. On Friday afternoon we will have our second annual round of lightning presentations, which will bring us up-to-date with a wide variety of some of the most exciting work being done in agricultural economics and policy. We will close the conference with a graduate student colloquium, which will consist of a foresighting exercise led by Deputy Director of the Innovation and Growth Policy Division in the Strategic Policy Branch of Agriculture and Agri-Food Canada.

Thanks so much for joining us, and thanks to our sponsors for their generous support, without which we would not be able to host such an important event. We are truly grateful.

Enjoy your time at the policy conference!





## Conference Schedule Programme de la conférence

Thursday Jeudi January 23 janvier	08:00-08:45 AM	<b>Breakfast and Registration</b> Petit déjeuner et inscription
	08:45-09:00 AM	Welcome and Opening Remarks Bienvenue et ouverture
	09:00-10:00 AM	<b>Keynote I: Nick Paulson</b> Conférence principale I
	10:00-10:30 AM	<b>Networking Break</b> Pause réseautage
	10:30-12:00 PM	Session 1: Risk Management Session 1: Gestion des risques
	12:00-01:30 PM	<b>Buffet Lunch and Networking Break</b> Buffet de déjeuner et pause réseautage
	01:30-03:00 PM	Session 2: Trade Session 2: Commerce
	03:00-03:30 PM	<b>Networking Break</b> Pause réseautage
	03:30-05:00 PM	Session 3: Food Price Inflation and Supply Chains Session 3: Inflation des prix des aliments et chaînes d'approvisionnement
	05:00-07:00 PM	Reception and Student Poster Competition Réception et concours d'affiches étudiantes



# Friday Vendredi January 24 janvier

08:00-08:30 AM	<b>Breakfast</b> Petit déjeuner
08:30-09:30 AM	<b>Keynote II: Joseph Balagtas</b> Conférence principale II
09:30-09:45 AM	<b>Poster Finalist Presentations</b> Présentations des finalistes des affiches
09:45-10:15 AM	<b>Networking Break</b> Pause réseautage
10:15-11:45 AM	<b>Session 4: Instability</b> Session 4: Instabilité
11:45-01:00 PM	<b>Buffet Lunch and Contest Winners</b> Buffet de déjeuner et gagnants du concours
01:00-02:15 PM	<b>Lightning Talk Session</b> Session de présentations éclair
02:15-02:45 PM	Closing Comments Commentaires de clôture
02:45-03:45 PM	Graduate Student Colloquium Colloque des étudiants aux cycles supérieurs



## **Conference** Agenda



### **Thursday**

Jeudi January 23 janvier

08:00-08:45 AM **Breakfast and Registration**Petit déjeuner et inscription

08:45-09:00 AM Welcome and Opening Remarks
Bienvenue et ouverture

09:00-10:00 AM **Keynote I Conférence principale I** 

Outlook for US Agriculture in Highly Uncertain Times
Nick Paulson, University of Illinois
US Agricultural Policy

10:00-10:30 AM **Networking Break Pause réseautage** 

10:30-12:00 PM Session 1: Risk Management
Session 1: Gestion des risques

#### **Climate-Smart Crop Insurance**

#### Alan Ker, Michigan State University

Crop insurance programs in much of the developed world penalize on-farm climate adaptation. I propose an alternative programming structure where coverage levels are based on the probability of loss rather than yield shortfall. While this approach would not disincentivize on-farm risk adaptation, it would notably redistribute public funds across crops and regions compared to current allocations.



## A review of the differences in public and private risk management tools available to major commodity types across Canada

Stephen Duff, Ontario Ministry of Agriculture

#### Are western Canadian crop farmers underinsured?

#### Peter Slade, University of Saskatchewan

Crop insurance programs are heavily subsidized in Canada. Yet over the past two decades, only a minority of farms in western Canada have chosen the highest level of crop insurance coverage. Meanwhile, enrollment in AgriStability has declined. This choice has led to reduced profitability and heightened risk exposure for farmers. This presentation examines the factors influencing insurance choices and the broader implications of "underinsurance" on farm sustainability and risk management.

# 12:00-01:30 PM Buffet Lunch and Networking Break Buffet de déjeuner et pause réseautage

01:30-03:00 PM **Session 2: Trade** 

**Session 2: Commerce** 

## The Fading Rules-based Trading System—The Risks for Canadian Agriculture

William Kerr, University of Saskatchewan

#### Cross-border environmental policies and international trade Clark Lundberg, San Diego State University

Global environmental externalities are one of the most pressing policy challenges of the modern era. Unilateral policy options to address global externalities are limited, however, by sovereignty and a general difficulty in achieving environmental objectives across national borders. We study an emerging trade policy tool used in cross-border environmental policies---environmental standards for imports--using a European Union program aimed at mitigating illegal timber harvest in tropical timber exporting countries. Through bilateral agreements with partner countries, the program established de facto import restrictions through supply chain transparency and certification requirements on forest-products. We find that the policy led to a diversion of partner country exports away from the EU towards other markets, particularly East Asia, with no discernible reductions in forest loss. Our findings highlight the role that trade diversion can play as a leakage mechanism in such cross-border environmental policies. We contrast



these findings with the effectiveness of similar environmental commitments established in preferential trade agreements. Preferential access to domestic markets established by trade agreements can induce compliance with externally imposed environmental standards if the net benefits outweigh the benefits of exporting to alternative markets. We conclude that trade policy can be an effective tool to achieve cross-border environmental goals but must be carefully designed to ensure domestic markets remain sufficiently attractive to trading partners.

## **Look ahead at Government of Canada Trade Policy Priorities**Matt Smith

In addition to talking about trade policy with the United States with a new U.S. Administration, Matthew will describe ongoing trade negotiations (Indonesia, Ecuador, ASEAN, Costa Rica's accession to the CPTPP Agreement) and engagement in multilateral organizations.

03:00-03:30 PM **Networking Break Pause réseautage** 

03:30-05:00 PM Session 3: Food Price Inflation and Supply Chains
Session 3: Inflation des prix des aliments et chaînes d'approvisionnement

**Moderator:** Stephen Duff

#### Interactions Between Retail Pricing and Food Policies

José Nuño-Ledesma, University of Guelph

In this presentation, I emphasize the importance of accounting for price discrimination and other strategic responses by sellers when evaluating the effectiveness of food and nutrition policies. Specifically, I will present insights from a series of recently published studies examining how portion cap rules and taxes impact markets where retailers use volume discounts and commodity bundling. These findings reveal nuanced consumer and market dynamics that challenge conventional policy assumptions. Finally, I outline opportunities for further research, including the broader implications of seller behavior and pricing strategies on consumer welfare and policy outcomes.

**Economic modelling of agricultural commodities**Scott Biden, University of Guelph



#### **Supply Chain Resilience**

#### Jill E. Hobbs, University of Saskatchewan

The presentation assesses lessons for resilience from recent supply chain disruptions. Perspectives on resilience and metrics for assessing supply chain resilience are discussed, along with policy implications.

Mike Von Massow, University of Guelph

05:00-07:00 PM Reception and Student Poster
Competition
Réception et concours d'affiches
étudiantes



## **Friday**

### Vendredi January 24 janvier

08:00-08:30 AM **Breakfast Petit déjeuner** 

08:30-09:30 AM **Keynote II Conférence principale II** 

Diet Quality in the United States: causes, consequences, and implications for nutrition security

Joseph Balagtas, Purdue University

In this talk we introduce a novel survey instrument and dataset for measuring diet quality in the U.S., enabling monthly tracking over the past year. The dataset, a product of the Center for Food Demand Analysis and Sustainability at Purdue University, allows us to observe high-frequency time-series variation in diet quality, and to explore heterogeneity across demographic, economic, and social factors. We explore causes and consequences of poor diet quality, and discuss implications for "nutrition security" as a concept for understanding poor diet quality in the United States.

09:30-09:45 AM Poster Finalist Presentations
Présentations des finalistes des
affiches

09:45-10:15 AM **Networking Break Pause réseautage** 

10:15-11:45 AM Session 4: Instability
Session 4: Instabilité

#### AAFC policy research priorities in unstable times Warren Goodlet, Agriculture and Agri-Food Canada

Canada's agriculture and agri-food sector is facing continued significant unstable economic, geo-political, and policy conditions. Among others, these include extreme weather events, trade disruptions, geo-political events, and supply chain concerns. The government needs to understand how existing programming will respond to such factors, and the implications of potential further actions it could take. This



talk will outline some of the conditions faced by the sector and highlight analytical questions the government is considering as it develops options to respond.

#### Jasen Aussant, Alberta Grains

## Navigating through uncertainty in 2025 and searching for positive signals from agri-food markets

#### J.P. Gervais, Farm Credit Canada

2025 will be a pivotal year for the Canadian agriculture and agri-food industry. Ongoing pressures on profit margins, an evolving farm financial landscape, the threat of US tariffs are some of the economic drivers that make 2025 projections particularly murky. Sorting through the noise and clearing out a few clouds reveal a few bright opportunities and highlight the critical risks to manage going forward.

# 11:45-01:00 PM Buffet Lunch and Contest Winners Buffet de déjeuner et gagnants du concours

## 01:00-02:15 PM **Lighting Talk Session Session de présentations éclair**

## Carbon offsets to promote the adoption and upscaling of agricultural practices and technologies

#### Aurélie Harou, McGill University

Carbon offsets can offer financial incentives to encourage the adoption of practices that might simultaneously replenish soil organic matter levels, for example, while mitigating greenhouse gas emissions by capturing and storing carbon in agricultural soils. Despite their potential, the use of carbon offsets in agriculture remains limited due, in part, to institutional and logistical challenges. In this talk, I discuss the feasibility of using carbon offsets to encourage adoption and best management practices, highlighting some challenges associated with implementing such programs.

## Changes in food processing innovations between 2018 and 2023: from business microdata

#### Deepananda Herath, Agriculture and Agri-Food Canada

Canada's food and beverage processing is the largest manufacturing Industry and the largest manufacturing employer and being recognized as a significant contributor for Canada's potential for export growth. The recent (particularly post pandemic) dynamics of food processing innovations and the adoption of new technology are



important in shaping the future growth trajectory and the export competitiveness of Canada's food processing industry. I have used business micro data from Statistic Canada's Innovation in Food Processing Industry Survey in 2018 version and recently released 2023 version to compare and explore some significant changes in the aspects related to food processing innovations such as types of innovative activities; objectives of innovative activities; R&D expenditures; use of government programs; financing; obstacles for innovation activities etc., in Canada during this period.

#### Food prices, inflation, and food security

#### Laura Stortz, Agriculture and Agri-Food Canada

This presentation will focus food security indicators and food price and affordability trends in the post-pandemic era.

## E-commerce as a resilience strategy: mitigating the impact of COVID-19 on Canada's agri-food trade

#### Promesse Essolema, University of Guelph

The COVID-19 pandemic has significantly impacted Canada's agri-food trade, prompting a need for resilience strategies. This study investigates the pandemic's effects on Canada's role in the global agri-food industry, focusing on e-commerce resilience. Using monthly data from 2018 to 2022, including agri-food exports, e-commerce statistics, and COVID-19 indicators, we employ the gravity equation method to analyze the interaction between COVID-19 and e-commerce on agri-food trade. Our findings indicate that increased e-commerce significantly mitigates the pandemic's adverse effects on Canadian agri-food exports, particularly when interacting with COVID-19 dynamics. Supporting e-commerce initiatives is crucial for future resilience, emphasizing policy measures for innovation and adaptation. This research provides insights for policymakers and stakeholders to maintain Canada's competitiveness and sustainability in agri-food trade post-pandemic.

#### Capacity utilization in food and beverage processing

#### Amanda Norris, Farm Credit Canada

The capacity utilization rate is a common metric for manufacturers to identify where potential is not being reached. Simply put, it is a measure of actual output divided by potential output. Typically, a higher percentage is better, but a look below the surface reveals something interesting for the food and beverage processing industry.

#### Harvesting Benefits: Exploring the Effects of Second-Best Policies on Enhancing Soil Organic Carbon Stocks in Agriculture

#### Devin Serfas, University of Alberta

Targeted agricultural subsidies can be an effective policy tool to enhance soil organic carbon (SOC) sequestration. This paper assesses the effectiveness of a second-best



hypothetical policy which subsidizes additional canola hectares optimally for each soil zone in Saskatchewan in an effort to increase SOC. I develop a simulation model that includes on-farm acreage responses and employs a novel field-level dataset from the Saskatchewan Crop Insurance Corporation to measure changes in SOC stocks attributable to changes in cropping choices. I find that a policy offering optimal subsidies specific to each soil zone for additional hectares of canola, implemented in 2019 and continuing indefinitely for all insured fields in Saskatchewan, generates an external social benefit worth 15.9 billion CAD when the subsidy is set to maximize the net external social benefit, and 31.8 billion CAD when it is set to maximize the change in total welfare. This paper highlights the potential environmental and social benefits of second-best policies as a cost-effective alternative to traditional first-best policies. It also shows how economic and scientific models can be combined to estimate soil characteristics, thereby avoiding the high cost of direct measurement.

02:15-02:45 PM Closing Comments

Commentaires de clôture

02:45-03:45 AM **Graduate Student Colloquium**Colloque des étudiants aux

cycles supérieurs



## **Speaker**Biographies

## Biographies des conférenciers



#### Alan KER

After obtaining his joint PhD in Economics and Statistics at North Carolina State University, Alan worked as a professor and subsequently Head in the Department of Agricultural and Resource Economics at the University of Arizona. In 2009, Alan joined the Department of Food, Agricultural and Resource Economics at the University of Guelph in his new position as Chair and Professor. In September 2014, Alan concluded his 5-year term and became Director of the Institute for the Advanced Study of Food and Agricultural Policy. Alan joined the Department of Agricultural, Food, and Resource Economics at Michigan State University where he holds the Elton R. Smith Endowed Chair in Food and Agricultural Policy.



#### **Amanda NORRIS**

Amanda joined FCC in 2024 as an Economist. She has expertise in the food and beverage industries, but also does research on supply management and consumer trends. Amanda comes from Agriculture and Agri-Food Canada where she amassed a wealth of economic, technical and industry knowledge through various positions including policy advisor, project lead and Economist. Amanda holds a master's degree in Food, Agricultural and Resource Economics from the University of Guelph. She is also a Board member of the Canadian Agricultural Economics Society where she promotes outreach and the importance of agriculture and food research.



#### **Aurélie HAROU**

Aurélie Harou is an assistant professor of Agricultural Economics in the Department of Natural Resource Sciences at McGill University. She is an associate editor at the American Journal of Agricultural Economics and chair-elect of the International Section of the Agricultural and Applied Economics Association. She obtained a Ph.D. in Applied Economics from Cornell University, after which she became an Earth Institute post-doctoral fellow at Columbia University's Agriculture and Food Security Center. She obtained a B.Sc. from the University of Sussex in Brighton, U.K., in Environmental Science and Geography and a M.Sc. from the University of California at Davis in Agricultural and Resource Economics.



Prof. Harou's research focusses on understanding how farmers adapt and build resilience to climate change and declining water resources. She also studies smallholder farmer behavior as it relates to the adoption of yield-enhancing agricultural technologies, market access to agri-food value chains and agriculture-nutrition linkages. Prof. Harou partners with various local and international organizations to conduct her work, including the U.N. Food and Agricultural Organization, World Bank, U.N. World Food Program, Catholic Relief Services, the International Maize and Wheat Improvement Center (CIMMYT), Sokoine University of Agriculture and International Food Policy Research Institute (IFPRI). Prior to obtaining her Ph.D., Prof. Harou worked for the U.S. Federal Emergency Management Agency on the National Flood Insurance Program, and later as an anti-trust consultant for an economics litigation company in Berkeley, California, followed by living in D.R. Congo for a year doing food security humanitarian work for Action Against Hunger.



#### Clark LUNDBERG

Clark Lundberg is an Associate Professor of Economics at San Diego State University. His research focuses on the impacts of market integration in the developing world with a particular emphasis on the intersection of the environment, agriculture, and trade. His work has appeared in leading economics journals including the Journal of the European Economic Association, the Journal of the Association of Environmental and Resource Economists, the Journal of Development Economics, and the American Journal of Agricultural Economics, among others. Clark has experience across both academia and government with previous appointments at the US Department of Agriculture and the US Department of Defense. He holds a Ph.D. in economics from the University of Washington, an M.A. in International Affairs from the George Washington University, and undergraduate degrees in Chinese, Linguistics, and International Studies from the University of Washington.



#### Deepananda HERATH

Deepananda Herath is Senior Economist, Economic and Industry Analysis Division, Research and Analysis Directorate, AAFC; Ph.D., 2001 (Agricultural Economics), University of Guelph, Ontario Canada, M.Sc. 1996 (Agricultural Economics), Post Graduate Institute of Agriculture, University of Peradeniya, Sri Lanka. Current research interest: Industrial organization issues and regulatory governance in the food & agribusiness industries. Competitiveness and innovation in agri-food sectors.





#### **Devin SERFAS**

Devin Serfas is an Assistant Professor and RDAR Chair in Applied Agricultural Economics and Risk Management in the Department of Resource Economics and Environmental Sociology at the University of Alberta. His research interests include agricultural production economics, grain handling and transportation, investment in agricultural R&D, and agri-environmental policy. Devin obtained his MSc. in Agricultural Economics from the University of Saskatchewan in 2018 and a PhD in Agricultural and Resource Economics from UC Davis in 2024.



#### **Jasen AUSSANT**

Jasen Aussant is a Senior Policy and Markets Analyst with Alberta Grains. He holds an undergraduate degree from the University of Ottawa and a Master's in Economics and Finance from the University of Alberta. With experience across all levels of government, Jasen brings a unique perspective to policy challenges, focusing on farming practices, sustainability, water policy, and rural economic development. Coming from a long line of farmers, he hopes to support the sector's economic sustainability and strengthen the resilience of Canadian farms.



#### **Jill HOBBS**

Dr. Jill E. Hobbs is a University of Saskatchewan Distinguished Professor in the Department of Agricultural and Resource Economics at the University of Saskatchewan. Her research encompasses agri-food supply chains, consumer behaviour, and food policy. Recent research has focused on supply chain resilience in the agri-food sector, consumer responses to new food technologies, food labelling and certification, and international regulation of gene-edited agri-foods. Dr. Hobbs earned her Ph.D. from the University of Aberdeen in the UK. She holds an M.A. from the University of Calgary and a B.Sc. (Econ) from Aberystwyth University, UK. Dr. Hobbs was appointed a Fellow of the Canadian Agricultural Economics Society in 2017 and an Honorary Life Member of the International Association of Agricultural Economists in 2024.





#### **Joseph BALAGTAS**

Professor Balagtas is a Professor of Agricultural Economics and Director of the Center for Food Demand Analysis and Sustainability at Purdue. He conducts research on the economics of agricultural markets, including agricultural and food policy, the industrial organization of agricultural markets, and poverty and food security. He has won research quality awards for his work on international dairy trade, competition in U.S. dairy markets, and food security among rural households in Bangladesh. Current projects include economic analyses of consumer behavior in food markets, competition in the supply chain for beef, and supply and demand for food away from home. Professor Balagtas served as a Senior Economist at the White House's Council of Economic Advisers, and was a Fulbright Senior Scholar and Visiting Scientist at the International Rice Research Institute in the Philippines. He holds a Ph.D. in Agricultural Economics from the University of California, Davis, an M.S. in Agricultural Economics from Iowa State University, and a B.A. in Economics from Miami University. He lives in West Lafayette with his wife, Arlene, their three sons, and a beagle.



#### José NUÑO-LEDESMA

José Nuño-Ledesma is an Assistant Professor at the University of Guelph. His research centers on pricing, industrial organization, contract theory, and labour economics as they apply to the agri-food industry. José holds a PhD in Agricultural Economics from Purdue University and a master's degree in Applied Economics from the University of Minnesota, earned as a Fulbright Scholar. José has published in leading journals, including the American Journal of Agricultural Economics and the Canadian Journal of Agricultural Economics, where he currently serves as Guest Editor. With teaching experience in both the United States and Canada, he has taught courses on supply chain management, the economics of food markets, environmental economics, and macroeconomics. Before entering academia, José worked as an economist and specialist leader at the Mexican Central Bank.



#### J.P. GERVAIS

Jean-Philippe (J.P.) Gervais is the Executive Vice-President of Strategy & Impact, and Chief Economist at Farm Credit Canada (FCC). His insights help guide the organization's strategy to advance Canada's global leadership in food security and sustainable food production. He's a featured guest speaker at industry events, providing analysis of economic trends that drive the profitability of agribusinesses, primary ag producers and food and beverage processors. Prior to joining FCC in 2010, J.P. was a professor of agricultural economics at North Carolina State University and Laval University, where he held the Canada Research Chair in Agri-industries and International Trade



at Laval U. J.P. is a Fellow of the Canadian Agricultural Economics Society. He obtained his Ph.D. in economics from Iowa State University in 1999.



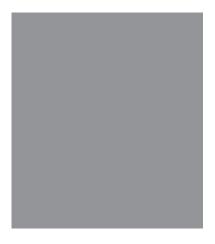
#### Laura STORTZ

Laura Stortz is an economist in the Research and Analysis Directorate within the Strategic Policy Branch at Agriculture and Agri-Food Canada (AAFC). Laura has an undergraduate and master's degree in Food, Agriculture and Resource Economics from the University of Guelph. Laura has worked as an food and agriculture economist in the federal government since 2020. Her research interests include food security, food prices, inflation, innovation, sustainable development, consumer preferences, and value chain analysis.



#### **Matt SMITH**

Matthew has held a range of trade policy and negotiations roles over the past 20 years at Global Affairs Canada and at Agriculture and Agri-food Canada (AAFC), working on a number of trade agreements including Canada's agreement with the United States and Mexico. He has represented Canada at meetings of the World Trade Organization and the World Intellectual Property Organization. In his present role Matthew leads AAFC's trade negotiations team. Matthew holds a Master's degree in political science from the University of Toronto.



#### **Mike VON MASSOW**





#### **Nick PAULSON**

Paulson holds the Gardner Hinderliter Professorship in Farm Management in the Department of Agricultural and Consumer Economics (ACE) at the University of Illinois at Urbana-Champaign. He also currently serves as the Associate Head and Director of the farmdoc extension project in ACE. Paulson's appointment incudes teaching, research, and extension responsibilities. He has taught courses on small business finance and international agribusiness at the undergraduate level, and agricultural finance, risk management, and econometrics at the graduate level. Paulson's applied research program focuses on agricultural finance, farm and risk management, and agricultural policy. He is a member of the award-winning farmdoc extension project team, having contributed more than 600 extension articles to the farmdoc daily website. In 2019 he served as the Senior Economist for agriculture and trade on the Council of Economic Advisers at the White House.



#### **Peter SLADE**

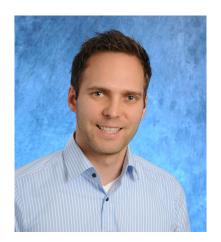
Peter Slade is an associate professor and Canadian Canola Growers Association chair in agricultural policy. His examines the effects of Canadian agricultural policy and adoption plant-based foods and diets. Peter has published widely in food, economics, and agricultural economics journals. He holds a PhD from the University of Guelph and is a member of the editorial board of the Canadian Journal of Agricultural Economics.



#### **Promesse ESSOLEMA**

Promesse Essolema is a Research Associate in the Department of Food, Agricultural, and Resource Economics (FARE) at the University of Guelph. He holds a Master's degree from the FARE program, with research expertise in agri-food trade, digitalization, e-commerce, and empirical trade policy.





#### **Scott BIDEN**

Scott Biden is a Sr. Research Associate with the Institute for the Advanced Study of Food and Agricultural Policy in the Department of Food, Agricultural and Resource Economics at the University of Guelph. He is also the Editorial Coordinator with the Canadian Journal of Agricultural Economics/ Revue canadienne d'agroeconomie. Scott's research is focused on building and maintaining a series of interregional, economic trade models of key agricultural industries to assess 'what if' type policy questions through price and quantity impacts along a vertically integrated supply chain. His previous research has focused on the intersection between biotechnology, policy, and the environment. Scott holds a Bachelor of Science in Economics and Germanic Studies from the University of Victoria and a Master of Science in Agricultural Economics from the University of Saskatchewan.



#### Stephen DUFF

Coming from dairy and beef background in Northumberland county, Steve completed a Masters in Ag Economics from the University of Guelph in 1996 focusing on trade liberalization in dairy between the US and Canada. After a year as policy researcher for the Ontario Milk Marketing Board, Steve joined OMAFRA in late 1997. For 15 years, Steve was OMAFRA's lead on business risk management programs such as AgriStability and the Risk Management Program. Steve is currently OMAFRA's Chief Economist. Steve is also a lecturer in agricultural economics at the University of Guelph. Steve and his wife Robyn also operate a beef and cash crop operation near Colborne, Ontario. Steve is currently in his second term on the board of Farm Management Canada as a farmer director and is currently board Chair.



#### Warren GOODLET

Warren Goodlet joined Agriculture and Agri-Food Canada (AAFC) in 2020 as the Director General of the Research and Analysis Directorate. He leads a team that provides economic analysis, information, and forecasts related to the domestic and international agriculture and agri-food sectors, including economic and social trends, and the structure and performance of the Canadian agriculture and agri-food sector. Prior to joining AAFC he worked at Environment and Climate Change Canada from 2009 to 2020 on a number of regulatory initiatives addressing air pollutants and greenhouse gas emissions, as well as spending over a year in the Deputy Minister's Office as a policy advisor. He also spent five years in the Economic Analysis Directorate as a Director, Executive Director, and Acting Director General, overseeing teams of economists and policy analysts to provide economic analysis and advice on the



design and competitiveness implications of environmental policies. Warren has also worked at Finance Canada as an economist on climate change files and spent two years as a public school teacher. He holds a BSc in Biological Science and an MA in Economics from the University of Guelph, as well as a BEd from St. Thomas University.



#### William KERR

William Kerr is University Distinguished Professor Emeritus in the Department of Agricultural and Resource Economics at the University of Saskatchewan, Canada. He has a PhD in Economics and Agricultural Economics from UBC. He has written extensively on agricultural trade issues. He has published 25 books and more than 300 journal articles. He is a Fellow of the Canadian Agricultural Economics Society.



# Research Poster Abstracts

## Résumés des affiches de recherche

## **01.** The effects of differential benefit framing on consumer willingness to pay for gene edited canola

Presenting Author: Frank Won, McGill University

Co-Author: Mary Doidge McGill University

Canola is vital to Canada's agricultural economy, yet climate change threatens its productivity. Gene editing offers solutions by enhancing traits like disease resistance and drought tolerance, but public acceptance of gene edited agricultural products remains limited. This study examines how framing the benefits of gene editing as either private, societal, or neutral affects Canadian consumers' willingness to pay for enhanced canola oil. Findings aim to support food and agricultural policy by identifying effective communication strategies, fostering acceptance of food technologies, and building trust in innovations tackling societal challenges. Data collection is expected to conclude in early January 2025.

## **02.** Formal and Informal Relational Contracts: The Grocer-Supplier Relationship in Canada

**Presenting Author:** Alex DesRochers, University of Guelph **Co-Author:** José Nuño-Ledesma, University of Guelph

We provide an analytical framework to understand the grocer-supplier relationships, with a focus on the potential implications of an industry-wide Code of Conduct (CC) in conflict adjudication. We interpret the CC as an instrument shifting the balance between internal (industry-driven) and external (regulatory) methods of resolving disputes. Using a standard relational contracting model, we assess welfare outcomes under three scenarios: the absence of a CC, a government-mandated CC, and a CC voluntarily adopted by the industry. Additionally, we explore some implications of increasing market consolidation in the grocery sector.



#### 03. Inuvialuit Values in the Harvest Study

Presenting Author: Julia Poissant, University of Alberta

Co-Author: Brenda Parlee, Brent Swallow, and Xiaoli Fan, University of Alberta

Following the IPBES report on Valuation of Nature, we aim to be explicit in embedding Inuvialuit values into a new harvest study design. What values do hunters hold around the harvest study, and what would incentivize a high level of participation? I distributed a survey to members of Hunters and Trappers Committees in the Inuvialuit Settlement Region that included a stated preference section. Results show the trends of economic, environmental, and culture values among different hunters. These results will assist Inuvialuit decision-makers by narrowing down possible alternatives in policy development that are reflective of local values and contexts.

## **04.** The Effect of Traditional Health Beliefs on Sustainable Food Consumption

Presenting Author: Yiru Wei, Dalhousie University

Co-Author: Yanbo Xiao, Beijing University of Chinese Medicine; Wenguang

Zhang, Beijing Normal University; Ji Lu, Dalhousie University

Canada's agri-food system can benefit from a synergy between the cultural-social trends of healthy and environmentally sustainable consumption. This study investigates the psychological mechanism through which traditional Chinese health beliefs (TCHB) link healthy eating and sustainable consumption. Data were collected from 978 Chinese consumers through an online survey. Using a structural equation model, the findings show that TCHB strengthens the connection between health and sustainability concerns, thus promoting healthy and sustainable food choices. The results highlight the potential of the belief in living in harmony with nature to inspire communication policies for a healthier and more sustainable agri-food system.

## **05.** Financial Concerns and Household Food Waste Reduction Behaviour in Nova Scotia, Canada

**Presenting Author:** Prosper Kayelle, Dalhousie University **Co-Author:** Emmanuel Yiridoe and Ji Lu, Dalhousie University

Household food waste reduction is a major intervention challenge, and its complexity and link to household financial concerns (HFC) and behaviour are not well understood. Food waste-induced economicimpacts are explicitly disaggregated into important components, and this study investigated HFC as an obstacle preventing food waste. Survey data from a sample of N=750 Nova Scotia households was analyzed using structural equations modelling. Fresh fruits and vegetables accounted for the highest proportion of food waste (16%). Results of the extended Theory of Planned Behaviour model reveal that households that could not afford food had increased intention to reduce food waste.



## **06.** Roles of Food Cooperatives in Responding to Crises within the Food System

**Presenting Author:** Temitope Atanda, University of Alberta **Co-Author:** Kevin Jones and Dan Yu, University of Alberta

The surge in food prices and inflation is driving millions of Canadians into food insecurity, making it difficult for households to access affordable and nutritious food. This research investigates the roles of food cooperatives in addressing these crises to promote affordability, sustainability, and resilience. Preliminary findings from documentary analysis reveal that food cooperatives in Alberta improve access to affordable, healthy food and strengthen food security through local sourcing, community-driven initiatives like food rescue programs and food drives, and sustainability strategies that support local farmers and reduce waste. Policymakers should leverage co-ops to address food crises and build resilient food systems.

## **07.** Examining the relationship between housing affordability and food insecurity in Canada

Presenting Author: Truong Pham, University of Guelph

Co-Author: Brady Deaton, University of Guelph

This study investigates the relationship between housing affordability and food insecurity in Canada. We use homeownership status and housing costs as indicators for housing affordability. While previous research has evidenced that food insecurity is lower for homeowners compared to renters, it is unclear how housing costs affect the prevalence of food insecurity and whether the risk of food insecurity differs between homeowners with mortgages and homeowners without mortgages. This study explores these questions using data from Canadian Income Survey and multinomial logistic regression approach. The findings may be used to guide policy interventions aimed at addressing food insecurity in Canada.

## **08.** Urban Versus Rural Food Insecurity: Evidence from Canada

**Presenting Author:** Anna Russo Spena, University of Guelph

**Co-Author:** Spencer Henson, University of Guelph

The study investigates rural-urban disparities in food insecurity in Canada, utilizing 2021 Canadian Income Survey (CIS) data and the Household Food Security Survey Module (HFSSM). While 84% of Canadian households were food secure, rural residence decreases the probability of food security by 1.5% and increases severe food insecurity by 0.6%. Econometric analysis, accounting for socio-demographic variables, indicates significant associations between food insecurity and factors like education, age, employment precariousness, and area of residence. Findings suggest rural households face unique challenges, including limited access to affordable food outlets and higher costs. These insights inform targeted policy interventions to address food insecurity.



## **09.** Estimating the Marginal Cost of Methane Abatement for Representative Feedlot Operations in Canada

Presenting Author: Joren Johnson, University of Alberta

Co-Author: N/A

Beef and cattle production accounts for 71% of Canadian agricultural methane emissions. This study developed two Marginal Abatement Cost Curves to evaluate the cost-effectiveness of various methane abatement strategies in Alberta's beef feedlot sector. The findings show that strategies such as breeding for low residual feed intake, feed management practices, and rumen manipulation techniques, including feed additives offer methane reductions at negative costs, while others face significant economic and logistical barriers. Given Canada's net zero emissions target by 2050, the study emphasizes the need for supportive policies, financial incentives, and industry collaboration to facilitate widespread adoption of abatement technologies.

## 10. Financial Feasibility of On-farm Production of Green Ammonia

Presenting Author: Andrews Sai, University of Guelph

**Co-Author:** Alfons Weersink, Aaron De Laporte, Mario Tenuta, Claudia Wagner-Riddle, University of Guelph

Traditional ammonia production, essential for agricultural fertilizers, relies on fossil fuels and centralized facilities, contributing significantly to carbon emissions. Green ammonia technology provides a sustainable alternative by using renewable energy for water electrolysis to produce hydrogen, which combines with atmospheric nitrogen to create ammonia. This study develops a Capital Budgeting Model (CBM) to evaluate the financial feasibility of on-farm production, incorporating Net Present Value (NPV) analysis. Key components like electrolysis units, nitrogen generators, and storage systems are assessed alongside operational costs and environmental benefits. The framework equips farmers to make informed decisions about implementing localized, sustainable ammonia production systems.