

Teaching and Educational Commentary

Educational Materials Addressing Industry and Market Developments: Introduction to the Special Issue

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Abstract

The agriculture and agri-food industries rely on useful case studies and teaching materials to assist in knowledge communication and transfer of matters relating to technology change and adoption of new innovations, a supportive regulatory environment, equitable access to information, and corporate responsibility, among other issues. Valuable case studies and lesson materials may be underappreciated where it is not accompanied by rigorous data analysis and hypothesis testing. This introductory note summarizes the importance of eight contributions to the teaching literature and argues that these contributions can play substantial a role in helping with teaching fundamental concepts in agricultural economics and agribusiness.

1 Motivation for the Special Issue

Narratives relating to communication of industry and market developments, government and private programmatic impacts and delivery, educational or extension initiatives, and other training and learning methodologies in partnership with or exclusively within industry and non-governmental organizations are often not documented in the agricultural and applied economics literature due to a lack of hypothesis testing, statistical rigour, or theoretical foundations. This introduction to the Special Issue on Educational Materials about Industry and Market Developments argues that there is educational value in sharing and explaining how such technical developments are communicated, in addition to communication of insights into government programs and impacts, market and industry reports, and successes and failures of efforts to support programs and initiatives in government and industry. Such articles and information may serve as models for adoption and modification of new innovations and processes by future industry and serve as tools in the classroom for educational purposes.

For this Special Issue, we have collected eight interesting and informative papers that each provide a different approach to examining and learning from case studies in agribusiness, including communication of new technologies and government programs in support of agribusiness, addressing regulatory barriers, consumer trends and impact of exogenous shocks, corporate social responsibility, and demand for risk management education. Each considers both the student and career professional and most include teaching notes or models for adapting lessons in the university classroom and extension curriculum.

We expect this Special Issue will be of interest to agriculture and agri-food industry stakeholders including producers, agribusiness managers, producer support groups, input providers, processors, local to federal government agencies, and extension personnel. Students and educators of agricultural and applied economics, agribusiness economics and management and related agri-food disciplines interested in knowledge and information transfer will also be interested in the Special Issue.

2 Highlights of Papers in the Special Issue

Bina and Tonsor et al. (2023) describe a publicly available Meat Demand Monitor (MDM) dashboard, a monthly national survey covering more than 2,000 responses representative of U.S. Census Bureau estimates for various demographic factors summarizing domestic meat demand and consumer behavior. Summary reports address characteristics influencing demand, awareness of US meat industry issues, and other related topics. Reports and raw survey data are available through the MDM project website. Questions can be posed *ad hoc* relating to, for example, meat consumption during food safety incidents and attitudes relating to meat related topics. These and other questions can inform policymakers on matters such as consumer-level impacts of an economic disruption or during volatile market conditions. The MDM is discussed as an alternative, time-efficient approach to extension education, combining survey design methods, statistical analysis, and web application development.

Bhattari and Davis (2024) present a mixed motive bargaining game that can be used to assist in teaching the economics of corporate social responsibility (CSR) and the trade-offs involved. As a teaching tool, the game is designed to be played in class. An Excel workbook and instructions are included. As agri-food industries seek to enhance their CSR visibility and credibility, it is important that students of economics and other disciplines such as law, science, etc., are able to interpret critically the balance between social responsibility and business interests. The authors cite several examples including legislation that aims to improve production animal welfare. The tool is a mixed motive bargaining game that will help students understand better situations where opposing views exist but where sides must come to some agreement, often involving a compromising resolution. The authors also provide results of an application of the game in a class of 70 students.

Garwood and Coffey (2024) observed that in the food and agriculture industry there is a gap in the market for risk management executive education, as well as a lack of research addressing preferences and willingness to pay for such education. To address that gap, the authors conducted an online survey of professionals in the food and agriculture industry, as well as follow-up interviews. From those activities, the authors concluded that respondents highly value such education as well as opportunities to apply that knowledge and develop their network of professional associates. Participants indicated a willingness to pay between \$1,500 and \$2,000 for a two- to three-day executive education experience.

Dewbre et al. (2024) present an interesting equilibrium displacement model applied to supply and demand of corn that links to hog and pork markets. The model is developed with lesson files to allow students the opportunity to apply exogenous shocks and develop policy options emulating market conditions from farm to retail. Both consumer and producer perspectives are considered, allowing students to challenge their economic knowledge and intuition regarding the impact of such shocks. Teachers of agricultural policy, consumer and producer economics, and agricultural trade will find these models considerably helpful in the classroom.

Kim et al. (2024) researched communication strategies to improve equitable access to the Paycheck Protection Program (PPP) as a source of relief for agricultural producers. Past research indicates that lack of knowledge about eligibility and the application process negatively influenced PPP approval rates for areas with a higher population of female and African American producers during COVID-19. The authors found that communication strategies used at the time to inform minority farmers about the PPP were not as effective as they could have been. Communication weaknesses and challenges are discussed. Recommendations to increase communication efficiency were identified as building a connection with farmers prior to using online resources, using personalized communications, and seeking partnerships to leverage their social capital. Agricultural extension personnel and government

agencies working with minority farmers will find this study particularly interesting.

Peralta et al. (2024) argue that experiential teaching in postgraduate agribusiness requires both classroom engagement and wider industry experience. They present two examples from the Master of Global Food and Agricultural Business program at the University of Adelaide, which incorporates both study tours and agribusiness internship opportunities. The authors reflect on experiential learning theory to assess benefits of their approach, including reflection on assessment tasks that link both knowledge base and internship experiences. In the context of agribusiness, challenges are discussed, including setting and aligning expectations, communication in non-academic settings, and intellectual property issues. Suggestions are provided for both undergraduate and graduate level programs.

Gurung et al. (2024) note that while the concept of food freedom (the right to buy and sell foods of one's choice with reduced government regulation) has been promoted since 2013, little is known regarding economic viability, resilience, and industry growth potential of the Home Cooking Movement (HCM). Their case study addresses progress and challenges of the HCM industry, examining HCM legislation, the underlying economic systems, and the application of Diffusion of Innovation Theory. Teaching notes are provided to enhance the value of this case study for students of agricultural economics and agribusiness, as well as policymakers and industry advocates.

Westover and McCarty (2024) present an interesting case study involving marketing of a technology to convert shipping containers into hydroponic animal feed production systems. The technology has been developed by Renaissance Ag and allows a single shipping container to produce 1.5 tons of livestock feed per day, requiring less water than conventional agriculture. This case study requires students to consider trade-offs of selling in different markets, and to consider how a limited marketing budget might most efficiently be utilized to address those markets.

3 Discussion

Agricultural and agri-food industries rely on innovative research and development, technological progress, and a supportive policy environment in order to thrive in competitive environments. This Special Issue has brought together eight diverse papers of interest to students, instructors, and industry professionals involved in agriculture and agri-food industries. Each paper reports on a particular case study or perspective of relevance to one of the essential elements of our industry noted above. Many papers in this issue also include teaching tools for application in the classroom and extension education settings. Readers who are also educators are encouraged to spend time to familiarize themselves with those valuable teaching tools.

The topics discussed and the case studies of this Special Issue address matters of high concern to our profession, including welfare distribution and risk management; market development, consumer preferences, and corporate responsibility; communication of opportunities, experiential learning, and regulatory affairs. Most of these topics, if not all, are essential learning for the agricultural economics and agribusiness students and professionals. This Special Issue makes valuable contributions to learning material to support knowledge transfer of those topics.

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