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Grand Challenge: To Ensure That All People Have Safe, Affordable, Accessible, and Acceptable Food for Leading a Healthy and Active Life

Norbert Wilson, Lauren Chenarides, Jane Kolodinsky, and Kathryn Boys

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According to The Sustainable Development Goals Report 2021, 2.37 billion people regularly face food security challenges. Additionally, the USDA Economic Research Service reported that 10.5% of U.S. households (13.8 million households) were food insecure (Rabbitt, et al. 2023). The COVID-19 pandemic challenged food access for some, especially the most vulnerable portions of society, including the low-income, elderly, and children. Additionally, COVID-19 shed light on the importance of the global food supply chain and the need to support its resiliency.

Frequently, consumers face an evolving set of food choices from changing technologies, production methods and locations, and places to acquire food. The resulting shifts in the food environments and markets generate a wide array of options to fit consumers' evolving ideas about food, health, and sustainability. At the same time, producers, processors, and other stakeholders strive to meet their organizations' goals through the efficient production, transformation, and distribution of foods. Yet even within this dynamic food system, COVID-19 exposed challenges in our food system, most notably when producers had difficulties shifting products from one distribution channel to another at the beginning of the pandemic. While innovation can help improve food safety, increasingly globalized agri-food supply chains mean that food safety challenges may have extensive geographic reach. In addition, agri-food supply chains are susceptible to food fraud, which can harm human health. Economic volatility and supply chain disruptions can increase the incentive and opportunity for such events. Changing conditions in the environment and climate will further complicate the path to meeting this grand challenge by introducing new and heightening existing risks to the safety and availability of agri-food products. Shaping agri-food systems and markets are policies from global, national, state, and private sector stakeholders.

To meet the grand challenge of food for all, we need analysis that identifies, predicts, and explains causal relationships of policies and market conditions in the food system. Agricultural and applied economics has the toolkit necessary to address many of these issues. However, this grand challenge touches diverse topics beyond economics, including public health, sustainable production systems, food science, and law. Thus, collaborations across multiple disciples are needed to offer holistic and actionable solutions to this grand challenge.

Key Questions:

1. What are the key risks, technologies, and emerging food market opportunities? How do we assess their impact on creating accessible, safe, affordable, and culturally acceptable food systems?
2. What policy instruments, if any, are needed to ensure a healthy, well-nourished population while enhancing the resilience and sustainability of the food supply (environment, economy, and community), considering affordability and acceptability?
3. How do we support food access to all people, especially the underserved, in ways that ensure food is available (sufficient supply), affordable (within economic means), accessible (physically reachable), and nutritious (meeting dietary needs)?
4. What are the most effective methods of providing food safety and nutrition information to help consumers optimize their food choices?
5. How do changing climate and environmental conditions affect the safety, availability, sustainability, and practices of agriculture and aquaculture production systems and related industries?

Key Outcomes:

1. An evidence base of the agri-food supply chain that informs public policy to
   - provide high-quality, nutritious food that is affordable, accessible, safe,
   - support food production systems that mitigate environmental degradation,
   - promote equity in employment, access, and health outcomes,
   - support stakeholders' needs, and
   - know if, when, and which interventions are warranted.
2. Measurements that can accurately identify communities facing low food access, such as food insecurity.
3. A food system that provides safe and affordable foods and allows consumers to make optimal decisions.

For More Information

Rabbitt, M. P., Hales, L. J., Burke, M. P., & Coleman-Jensen, A. (2023). Household food security in the United States in 2022.

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About the Authors: Norbert Wilson (nwilson@div.duke.edu) is a Professor with Sanford School of Public Policy at Duke University. Lauren Chenarides (lauren.chenarides@colostate.edu) is an Assistant Professor with the Department of Agricultural and Resource Economics at Colorado State University. Jane Kolodinsky (jane.kolodinsky@uvm.edu) is a Professor Emerita with the Department of Community Development and Applied Economics at the University of Vermont. Kathryn Boys (kaboys@ncsu.edu) is an Associate Professor with the Department of Agricultural and Resource Economics at North Carolina State University.