C-FARE January Newsletter Plaintext

Market Corner:

The U.S. and world population are expected to grow by approximately 30 percent by the year 2050 and world real income per capita is expected to grow by 98 percent. Population and income growth translate into a higher demand for high-valued food such as more protein-based foods and fruits and vegetables. It also means a higher demand for feed for livestock. Agricultural productivity has increased dramatically.

Today’s farmers produce 262 percent more food with 2 percent fewer inputs as compared to 1950. A major component of this increase in agricultural productivity is due to investing in public agricultural research. Alston et al. examined agricultural productivity of the 48 continuous states and obtained a benefit-cost ratio of 32 from investing in public agricultural research and extension, which means that the marginal dollar spent on public agricultural research and extension returns 32 dollars to society. Therefore, large benefits relative to costs exist for investments in U.S. public agricultural research.

Moreover, rapid agricultural productivity increases relative to increases in other food sectors of the U.S. economy, translating into falling real prices of food consumed at home. For example, during 1948 – 2018, the share of U.S. household income spent on food declined from 22.3 to 6.4 percent, while the total consumption of food increased. With Americans spending 6.4 percent of their income on food, the other 93.6 percent is available for spending on a wide range of other goods and services, including recreation, housing, transportation, education, and health care. Huffman and Orazem stated that the long-term rise of civilization and living standards throughout the world is largely a story about increasing agricultural productivity. With a 32 to 1 benefit-cost ratio, investment in public agricultural research and extension is a sure bet!

For more information on The Impact of Applied Research in Agriculture and Applied Economics on The U.S. Economy, please reserve your seat for our upcoming webinar from 12 p.m. to 1:00 p.m. EDT on January 22.

For consideration of this and more trends and topics, stay tuned! Share this newsletter with others — and to add your email, simply reply to this email. We want to hear from you!

— Luis Ribera, Texas A&M
Director Spotlight:

**BARRY BARNETT** is professor and chair of the Department of Agricultural Economics at the University of Kentucky. Twitter: (@UKYAgEcon).

**INTERESTS?** My research has been on agricultural policy and risk management in both the United States and lower income countries. Since becoming chair, my focus has shifted to supporting the research, extension, and teaching efforts of our talented faculty. Outside of work, I enjoy reading about African and European history.

**WHY UK?** It is home. My father worked at UK. I am a proud alumnus. I had the privilege to work for 23 years at two other outstanding universities (Mississippi State University and the University of Georgia). To come “full circle” back to UK has been a career dream come true.

**CONCERNS?** With increasing competition for limited federal and state funding, agricultural and applied economists must do a better job of explaining our “value proposition.” What we do is important. It impacts people’s lives. CFARE provides opportunities for us to communicate that message to a broader audience.

**ADVICE?** Get out of the office. Engage with users of our research and outreach. Learn to communicate with non-economists. Understand that policy changes “at the margin.” Be grateful for the privilege of a life devoted to learning and sharing what you learn.

**RECENT WORK** In the past several year’s Barry has published multiple works on a variety of topics including *Behavioral weather insurance: Applying cumulative prospect theory to agricultural insurance design under narrow framing* and *Area Yield Index Insurance or Farm Yield Crop Insurance? Chinese Perspectives on Farmers’ Welfare and Government Subsidy Effectiveness*.

**News:**

1. The U.S. Department of Agriculture (USDA) is working with the U.S. Department of Homeland Security (DHS) to bring online a new National Bio and Agro-Defense Facility (NBAF) in Manhattan, Kansas. This state-of-the-art facility will be a national asset that helps protect the nation’s agriculture, farmers, and citizens against the threat and potential impact of serious animal diseases.

   The DHS Science and Technology Directorate is building the facility to standards that fulfill the mission needs of the USDA which will own, manage, and operate the NBAF once construction
and commissioning activities are complete. USDA’s Agricultural Research Service (ARS) and Animal and Plant Health Inspection Service (APHIS) will conduct foreign animal disease research, training, and diagnostics in the facility.

More information on this here:

2. C-FARE’s Kathleen Liang is spearheading a project to Enhance the services to Small Farmers, Ranchers, and Landowners through the extensive action of the 1890 Center for Excellence. She is working on the following activities in 2021 to Develop a database of technologies, processes, and best management practices developed and tested by the 1890 LGUs and other agencies/organizations/institutions that focus on sustainable and profitable SFRLs.

Step 1.1. To build a truly cohesive and collaborative team across the 1890 institutions – organize and arrange two multidisciplinary team meetings with members in 1890 institutions to establish a common ground rule to design, develop, and communicate among all partners concerning information gathering and data collection.

**Outputs/Outcome:**
- Activities to engage 18 1890 institutions in five Thrusts
- A template to list data/information/best practices
- A network diagram to show sources of information, contact person, and other affiliated entities

Step 1.2. To work with partners and collaborators engaging in shared responsibilities to conduct a metadata/information search to identify existing programs, curricula, database, and best practices based on findings of Step 1.1, such as – farming practices by state/region, projects and programs that are successful and sustainable, climate variables (National and local weather monitoring stations), market risk assessment (USDA and regional prices, costs, financial indicators, inflation), community demographics/characteristics and more.

**Outputs/Outcomes:**
- A list of resources
- Data
- Best practices
- Other related information to represent the state/region of our collaborative effort
- An EXCEL table to describe sources of information versus uses of information
- A list of indicators to assess the quality of different sources versus different applications to SFRLs

For more information on this work please reach out to Kathleen Liang via email at cliang@ncat.edu.
New Directions:

Will an incentive-compatible indemnity policy please stand up? This Kansas State & Iowa State study evaluates the role of private market signals and conditional indemnity policies in livestock producers’ willingness to self-protect against disease and invest more in biosecurity. Their study focuses on Tier 1 swine diseases and U.S. hog producer decision-making is timely and informative for a multitude of current disease discussions. The full study is available here...

Which Small Towns Attract Start-Ups and Why? Using data on a sample of small Iowa towns consistently collected over two decades, they investigate how agglomeration economies, social capital, human capital, local fiscal policy, and natural amenities affect new firm entry. They found that human capital and agglomeration are more conducive to new firm entry than are natural amenities, local fiscal policy, or social capital. The full study is available here...

The market for traceability with applications to U.S. feeder cattle. For voluntary traceability programs, a key interest for program designers and policymakers is how to encourage participation. They contend that participating in voluntary traceability can be viewed as a product characteristic, and thus serves as a source of product differentiation. They study the implicit market for traceability systems for the first known time. The full study is available here...