October 2023 Newsletter

Hello Colleagues and Friends,

Welcome to our monthly newsletter! This month's features are:

- The Market Corner article titled **Rooting Agriculture and Food Systems in Interdisciplinary Education Pipelines** by C-FARE Board Member, Chyi-lyi (Kathleen)
 Liang
- New Direction features articles and papers titled:
 - C-FARE 2023 Brandt Forum Theme: Agriculture and Environmental Policy
 - Optimal Design of Climate-Smart Policy for Agriculture: Economic Principles and Political Considerations
 - o Understanding Supply Chains Is Crucial for Good Agricultural Policy

Keep reading to learn more,

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Market Corner

Rooting Agriculture and Food Systems in Interdisciplinary Education Pipelines

USDA has made significant investments in cultivating the next generation of the agricultural workforce. The recent NexGen program sets top priorities to invest in enhancing curricula, experiential learning, internship and apprenticeship opportunities, and active engagement with private sectors to help students transition into real-world challenges. One element that deserves more attention is to provide K-12 teachers innovative tools to integrate agriculture and food issues into proper courses in earlier stages of education. Knowledge and practices related to agriculture and food systems could be embedded in all subjects, such as Math, Biology, Chemistry, History, Art, Language, Literature, Music, Sports, and Health and Nutrition. The traditional view of agriculture with primary goals to provide food and fiber has evolved into a new paradigm of interactive systems that include a variety of workers, venues, and decisions. For example, 'USDA supports the development of circular bioeconomies, where agricultural resources are harvested, consumed, and regenerated in a sustainable manner. This approach can also create new revenue streams for agricultural producers and ensure that wealth and other economic benefits in the form of jobs and other opportunities are created, and stay, in rural communities.' To achieve this goal, we need to prepare and cultivate a new generation of teachers who are equipped with cutting-edge tools to deliver exciting, interdisciplinary, and research-based curricula for youth. There are a couple of suggestions gathered from field experts to assist K-12 teachers, particularly those serving limited-resource communities:

 Broadly share research-based data, publications, and case studies in both web-platform and printed resources that could be integrated into course contents or activities to engage learners.

- Engage with Cooperative Extension services to offer training and programs for K-12 teachers to access/apply innovative technology in teaching (e.g., sensor, robotic equipment, unmanned vehicles, virtual and immersive learning environments)
- Establish and maintain a consistent coaching and mentoring system at the state level for teachers to learn from peers, support each other, share experiences and curricula, and get feedback to invigorate existing courses.

Chyi-lyi (Kathleen) Liang, C-FARE Board Member and Professor at North Carolina Agricultural and Technical State University

ICYMI

- Join us at the next C-FARE webinar titled "Alternative Fuels and Policies to Lower their Carbon Intensity" on Thursday, Nov. 9 at 12 p.m. EST. Registration is available here.
- C-FARE's Webinar on "Agricultural Commodities, Livestock, & Specialized Crop Prices: Trends and Turnarounds" is now available on our website and through this recording.
- Check out our fourth episode of C-FARE's podcast <u>Get a Grip with FARE</u> featuring Peyton Ferrier and Steve Neff from the USDA Economists Group.

New Directions

- C-FARE 2023 Brandt Forum Theme: Agriculture and Environmental Policy.
 Concerns about climate change, the environment, food security and resilience, and the agricultural sector's economic viability have led to various government interventions.
 While economists advocate for financial incentives like a carbon tax, most interventions are through regulations and subsidies. One explanation the late Martin Weitzman provided is uncertainty about policy outcomes and industry behavior (Weitzman, 1974). Learn more here.
- Optimal Design of Climate-Smart Policy for Agriculture: Economic Principles and Political Considerations. Many countries implement policies to address farming-related conservation issues such as soil erosion reduction, water quality protection, and soil carbon sequestration for climate change mitigation (Salzman et al., 2018). These policies are often referred to as conservation programs or agrienvironmental policies (Baylis et al., 2022). Read more here.
- Understanding Supply Chains Is Crucial for Good Agricultural Policy.

 Agricultural economists recognized long ago that agriculture and the food sector have high rates of innovation, with new products and technologies emerging continuously. Further, an increasing percentage of the value of food and other farm-grown products

is generated outside the farm gate (Cochrane, 1979). The transition from ideas for new products to the actual goods and services utilized by consumers is through multiple supply chains that evolve and intersect over time. <u>Learn more here</u>.