

November 2023 Newsletter

Hello Colleagues and Friends,

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

- The Market Corner article titled **The Importance of the Educational Industrial Complex** by C-FARE Board Member, David Zilberman
- New Direction featured articles and papers titled:
 - [The National Food Hub Survey Data Dashboard](#)
 - [Findings of the 2021 National Food Hub Survey](#)
 - [Western Water Network: A Case Study in Water Network Formation](#)

Keep reading to learn more,

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Market Corner

The Importance of the Educational-Industrial Complex

The global agricultural and food economies are facing multiple challenges - growing food demand, adapting to climate change, improving the nutritional content of food, reducing negative environmental side effects, and improving the well-being of the rural sector. These challenges require changes in food and agricultural technologies. Fortunately, the land grant system and government commitment to public support of research provide a great foundation to reinvent food and agricultural systems in the US and globally.

The land grant system is a key part of a large publicly supported research system that provides basic knowledge and education about food, agriculture, and health. Increased basic knowledge is essential but not sufficient to drive technological progress. In the post-WW2 era, we have witnessed the emergence of institutions that translate new knowledge into practical innovation. In particular, the modern educational-industrial complex is a public-private partnership where intellectual properties developed in the public sector are transferred to startups or corporations that further upscale and commercialize it. Eventually, it leads to new supply chains that produce new goods and services. The cost of developing discoveries for commercialization is very high, sometimes ten times the cost of the original research, and transferring exclusive rights to develop

patents provides an incentive to do the job. However, public intellectual property management requires ensuring it will not be kept unutilized to protect existing technologies. It also requires judgment to identify when rights for new enabling technologies shouldn't be sold exclusively to allow developing industries to build on these technologies. For example, the rights to use basic genetic engineering tools shouldn't be sold exclusively to one company but will be available to multiple companies that may develop multiple applications. The development of the private sector that builds on public innovations also allows researchers to move from academia to the private sector and vice versa. Academics who discovered the new technology have a great capacity to develop it and, thus, should be allowed to be partners of startups as long as there is a clear separation between public and university activities. Finally, while technology transfer may provide some income to the universities, it's much below the need to build the knowledge base to reinvent the food system. Therefore, public support for research should continue and be expanded. Public research generating new knowledge is an important assurance for continuing innovation and change in agriculture and prevents technological stagnation and failure to address the major challenges facing agriculture and the food sector.

David Zilberman, C-FARE Board Member and Professor at University of California, Berkeley

ICYMI

- Join us at the next C-FARE webinar titled “**Big Data: Background and Applications used in Agriculture and Food Systems**” on Friday, Dec. 15 at 12 p.m. EST. Registration is available [here](#).
- C-FARE's Webinar on “**Food Hubs and Farm to School: Policy and Impact Across the Food System**” is now available on our [website](#) and through this [recording](#).
- Check out our fourth episode of C-FARE's podcast [Get a Grip with FARE](#) featuring Peyton Ferrier and Steve Neff from the USDA Economists Group.

New Directions

- **The National Food Hub Survey Data Dashboard.** Since 2013, the Michigan State University Center for Regional Food Systems (MSUCRFS) and the [Wallace Center at Winrock International](#) have conducted the [National Food Hub Survey](#) to identify trends in food hub economic growth and viability, their social mission and operationalization

of racial equity, and the opportunities and challenges faced by food hubs across the country. [Learn more here.](#)

- **Findings of the 2021 National Food Hub Survey.** The National Food Hub Survey is a longitudinal research project conducted biennially since 2012. With over 100 responses from across the country, the survey aims to increase understanding of food hub operational models and their financial viability, the impact food hubs have in their community, and the trends and changes within the food hub sector. [Read more here.](#)
- **Western Water Network: A Case Study in Water Network Formation.** Increased water scarcity and drought frequency are creating water management challenges for many communities in the western U.S. In response, the Western Association of Agricultural Experiment Station Directors sponsored a virtual summit in August 2020 to develop a framework for identifying and addressing the most pressing water issues in the western United States (the West). [Learn more here.](#)