Cooperative Extension and Public Outreach: Advancing Agriculture and Improving Lives

Overview

Photos provided by Purdue University College of Agriculture and the United States Department of Agriculture
“Extension and outreach provide trusted knowledge, objective, earned and validated through science from a proven source. That kind of knowledge is golden. It’s truly invaluable in the modern world’s often overwhelming surfeit of information and, unfortunately, misinformation from uncertain sources.”

Wendy Wintersteen, President, Iowa State University
Jay Atkridge, Provost, Purdue University

Advancing Agriculture and Improving Lives

Enhancing agriculture through scientific knowledge. Founded nearly thirty-five years ago, The Charles Riley Memorial Foundation (RMF) has demonstrated a history of promoting a broader and more complete understanding of agriculture, building on the legacy of its founder who devoted his life to enhancing agriculture through scientific knowledge. RMF has sponsored an overarching report “Cooperative Extension and Public Outreach: Advancing Agriculture and Improving Lives.” The highlights of that report with an additional observation are presented here. The report demonstrates how Extension, Non-Land-Grant Colleges of Agriculture (NLGCA’s) and Non-Governmental Organizations (NGO’s) are translating research and discovery into practical applications that advance agriculture and improve lives. It is important to understand how these separate organizations have programs and functions that engage stakeholders by contributing to the development and distribution of scientific knowledge related to agriculture, food, natural resources, and the improvement of the lives of residents of all ages in rural and urban communities.

Agriculture interwoven into the life and health. The nation’s deep relationship with agriculture has been interwoven into the life and health of every U.S. resident for more than 150 years. A unique collaboration of the federal government, educational institutions, and the agricultural community to underpin the discoveries and innovations essential for the viability of the food and agricultural industry was launched with the creation of Land-Grant Universities in the Morrill Act of 1862. The Smith-Lever Act of 1913, which created the Cooperative Extension Service (Extension), was another step forward to translate discovery and innovation into practical application. Through the Farm Bill, the social contract now includes NLGCA and NGO’s with the clear purpose to translate discovery and innovation into meaningful impacts for the farmers, entrepreneurs, and workers in the food and agricultural industry, the communities they work in, and the families they support.

U.S. agriculture’s competitive edge challenged. Today, U.S. agriculture’s competitive edge is challenged as public investments in agricultural research, extension and outreach trails other nations. Increasing agricultural productivity from the adoption of public research enabled the agricultural industry to cut inputs used by fourteen percent and simultaneously boost agricultural output by 98 percent. Yet, the U.S. public research expenditures dropped from four percent of agricultural gross domestic product in the early 2000’s to two percent today. Further declines in research and development threaten the future productivity of U.S. agriculture and its sustainability.

Critical juncture in time. Now is a critical juncture in time to renew the social contract between the federal government, agricultural universities, and non-governmental organizations that is vital to the economic, environmental and social sustainability of U.S. agriculture for decades to come. Extension and outreach have a fundamental role in engaging the research and knowledge from their respective institutions, translating it into a meaningful – if not life-changing – programs.

Each of these institutions have their own unique partnership with society and with each other. Together, they serve and support the educational advancement in pursuit of sustainable development. Working in an integrated and collaborative fashion, they translate and transport research and discoveries into meaningful engagement that builds agricultural enterprise and innovation, skilled labor workforces, thriving industry, and healthy, resilient communities.
Moving Agriculture Forward Through Extension and Public Outreach

Moving agriculture forward means addressing the critical societal issues through engagement, research and Education. Extension and Public Outreach efforts are vital – now more than ever – to engage people, business, and communities across the country to listen and respond to their concerns and issues. Some of the greatest initiatives include:

- **Securing the economic, environmental and social sustainability of agriculture** with regard to helping farmers make production decisions.

- **Addressing the emergence of digital agriculture and the evolution of big data** with regard to the agricultural industry, necessitating the education of farmers about proper use and integration of these new technologies, including integrating 4-H into this effort to help prepare the next generation of Science, Technology, Engineering, and Mathematics (STEM) workers.

- **Developing an approach to address the natural resource consequences of a variable climate**, implementing adaptive management processes that focus on maintaining health and resiliency to mitigate negative outcomes, amidst future uncertainty.

- **Fostering community resilience** in the face of changing demographics, catastrophic weather events, limited access to broadband and other technologies, creating opportunities for engagement and partnership in the solutions for the people and businesses of these impacted communities.

- **Improving water quality and quantity** by addressing conservation efforts relative to the issues regarding ground and surface water, including irrigation efficiency, aquifer management, residential conservation, nutrient management, agricultural pesticides, and erosion control – vital to the health and welfare of every state in the nation.

- **Initiating a comprehensive urban agriculture effort** that educates Americans about where, how, and by whom their food was produced, in conjunction with support of new, local and regional food production systems in rural and urban communities.

- **Recognizing the breadth and diversity of U.S. agriculture** by providing programs and services for farming operations large and small, especially the socioeconomically disadvantaged and underserved farmers, ranchers, and communities to increase rural prosperity for all.

The future portends a necessity to invest and advance the current state of agriculture in the United States, so the nation can be better prepared to face some of the most engrossing challenges facing its communities in the next decade. Translating and transporting research and discoveries into meaningful engagement will be essential to the mission of building a nation that is rife with agricultural enterprise and innovation, skilled labor workforces, thriving industry, and healthy, resilient communities. Cooperative Extension and Public Outreach bring the university to the community with a shared goal of improving lives and enhancing economic well-being. A brief definition of each is helpful in understanding how they intersect in their efforts to engage a diverse audience of stakeholders.
Extension, Public Outreach and the Unifying Message

Cooperative Extension Brings Research and Innovation Nationwide

Cooperative Extension is a nationwide education system that operates through land-grant universities in partnership with federal, state, and local governments. Extension programs are associated with seventy-six land-grant universities in all fifty states, the District of Columbia and five territories. Founded in 1913, Extension remains responsive to both local and national interests. Whether it is helping farmers incorporate digital agricultural technology, building our future labor force with advanced Science, Technology, Engineering, and Math (STEM) skills through 4-H, strengthening the health of our families, managing our natural resources in the face of climate variations, Extension improves lives urban and rural communities. Building on a rich legacy, Extension’s relevance will be measured by its ability to offer educational programs that build vibrant communities, strong families and sustainable businesses on both Main Street and the farm gate.

Public Outreach Leaves a Regional Footprint in Its Educational Efforts

Outreach and engagement also are part of the mission of public Non-Land-Grant Colleges of Agriculture (NLGCA’s). The fifty-eight NLGCA’s who grant degrees in agriculture are involved in educational outreach, complementing Cooperative Extension efforts. This includes helping farmers and ranchers produce food and fiber utilized by the world, and improving the lives of citizens through family and consumer science programs. NLGCA’s, which have a regional footprint, may be more involved in rural economic and community development activities than the Land-Grant Universities, who have more of a state-wide emphasis. Entrepreneurship and business development endeavors include farmers’ market or local food systems, alternative specialty crops, agri and eco-tourism, agricultural technology, and other agricultural-related enterprises. Public agricultural universities and NGO’s promote awareness of citizen needs and advocate for their states and regions to improve health, education, economic development and overall quality of life.

Contributions to the Unifying Message Effort

The recent report on “Cooperative Extension and Outreach: Advancing Agriculture and Improving Lives” is an integral part of RMF’s effort to develop a unified message to increase support for agricultural, food, and natural resources research, education, Extension and outreach. The primary goal of this report is to document the good works performed by Extension, NLGCA’s and NGO’s. However, in addition, during the process of developing the report, the authors recognized the power of greater unity in the outcomes of the most recent farm bill and federal appropriations cycles. Going forward, an even higher degree of substantive and strategic unity to support major increases in funding through USDA holds great promise to accelerate recent gains. A new alliance would include most, if not all, of the following: Association for Public and Land-Grant Universities (APLU), Friends of ARS, Non-Land-Grant Agriculture and Renewable Resources Universities (NARRU), Ag-Forward, Association of Agricultural and Applied Economics, American Statistical Association, National Coalition for Food and Agricultural Research (NCFAR), Supporters of Agricultural Research (SoAR), and the AFRI Coalition. By working together on a comprehensive strategy, beyond each group’s particular focus on one or more particular programs, great progress can be made toward fulfilling the vision of a unified message and approach.