

Background

Cooperative Extension faculty and staff have traditionally viewed disseminating research based agronomic information to producers, crop advisors and industry as a key role. Today, especially with the rapid development of the renewable energy sector, many opportunities exist to expand the role of Extension to create impact with communities through alternative approaches.

Several potential alternative roles used by Penn State Extension faculty and staff in the development are showcased here. These include taking a proactive approach to convene discussions, act as a catalyst to develop community projects, translating knowledge into application through demonstrations, transferring knowledge on emerging issues, and advising on public policy issues.

Each of these roles requires a new and different skill set but can result in considerable potential impact on stakeholders and communities. Extension faculty and staff will need support and training to develop these new roles effectively.

Extension as Convener

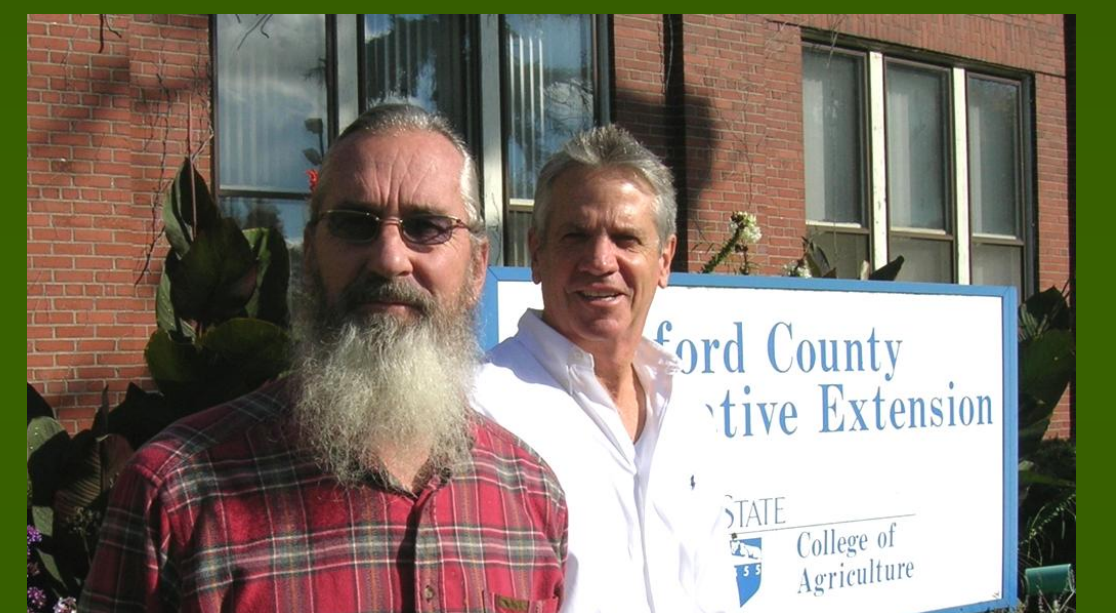
Universities are often uniquely positioned to play a convening role. They can serve as a respected third party unbounded by the constraints of municipal lines or the participants. As university agents in communities faced with new energy opportunities and challenges, Extension professionals can play a critical facilitation role.



Tim Pierson, an extension educator from McKean County, returned from a trip to Austria studying community based biomass energy systems. Tim worked with local officials to convene a study group to evaluate the potential of converting the town of Smethport, PA to a community based heating system. He brought together representatives from industry, Penn State, and state and federal government to provide input and support for the project. The group has developed funding for a feasibility study and is now pursuing funding for the \$50 million project.

Extension as a Catalyst

In some cases a catalyst is required to engage people and resources. Such a catalyst provides innovative leadership to establish partnerships, to engage appropriate resources, and to identify potential project funding. Because Extension is an embedded presence in communities, yet has ties and access to an array of expertise, it is well-positioned to play a catalytic role.



Joel Hunter and David Dowler, extension educators from Crawford County, saw a potential new market for oilseeds developing when a large biodiesel plant opened nearby. They developed funding to create a demonstration project with canola and camelina, created production recommendations, engaged a local feed mill to process the seed and a local seed dealer to market adapted lines. They also worked with university specialists to develop production and meal feeding recommendations for local layer and broiler operations.

Knowledge Translation

Sometimes Extension professionals play the role, not just as purveyors of knowledge, but as proactive generators of knowledge through the process of translating laboratory research to field implementation. Such applied research settings have been a hallmark of land-grant ag research and have produced an extraordinary impact on agriculture.



Glen Cauffman, Director of Farm Operations at Penn State, developed a research and demonstration program with Case New Holland assessing the potential of biodiesel blends in the university farm equipment. This led to conversion of the entire University diesel fleet to biodiesel and subsequent demonstrations of 100% biodiesel and straight vegetable oil (SVO) technology. The program has allowed Glen to develop an education program focused on practical aspects of biodiesel use on the farm.

Knowledge Transfer

While knowledge transfer has been a traditional role for extension educators in many disciplines, renewable energy has created an opportunity for developing expertise in new and novel disciplines. One example is the alternative energy credit and renewable energy marketplace. Educator Ed Johnstonbaugh from Westmoreland County used his background in the utility industry to develop an educational program on the value and the aggregation of alternative energy credits that were made available as part of the Pennsylvania Alternative Energy Portfolio Standard Program.



Ed developed a factsheet, conducted seminars and engaged many on a one-to-one basis to illustrate the potential economic benefit of the alternative energy credits. By quickly addressing this complex and emerging issue, Ed was able to develop an opportunity for many of his clientele.

Policy Development

Extension faculty and staff are also becoming engaged in an advisory role in policy development at all levels of government. Extension is uniquely adapted to work with local, state and federal officials.



One example in our system has been the role of the State Program Leader, Greg Roth. Greg participated on a Feed and Grain Task Force set up by the Pennsylvania Department of Agriculture to study the impacts of biofuel production on the feed and grain industry. Greg has also participated with USDA-FSA to provide feedback on the National Biofuels roadmap and how that should be implemented in Pennsylvania. Other extension faculty and staff have also been involved in similar advisory roles at the state and local level. In politically charged discussions, a science based objective perspective can be valuable to decision makers.