Initiating and Sustaining Conversations Between Organic Farmers and Extension

Abstract
The relationship between advocates of organic agriculture and land-grant university agents has evolved significantly over the past century, but land-grant research and Extension agents still confront many challenges to working with organic farmers. This article reviews the barriers to communication that have developed over the last century and initiates a discussion on how to facilitate successful collaborations among Extension agents, researchers, and organic farmers.

Introduction
We often ask ourselves: "Why don't organic farmers use our information more often? I've gone to their meetings and presented my data, but they still do not seem to want to hear what I have to say or follow my advice." When attempting to work with organic farmers, we are presented with several challenges that can complicate our Extension efforts. Challenges reported in previous studies include the following:

- A lack of prior engagement with existing organic farmers,
- A lack of regionally specific information on organic agriculture,
- A lack of training for Extension personnel. (Agunga & Igodan, 2007; Lillard & Lindner, 2012; Middendorf, 2007; Swisher & Monaghan, 1995), and
- A belief among some agricultural professionals that organic farming is a regressive step in agricultural production rather than an innovative farming system (Wheeler, 2008).

These obstacles are rooted in the development of two parallel farming systems, conventional and organic. The divergence of these two systems limits our efforts to make our programs accessible to all farmers and successfully communicate and collaborate with organic farmers. In this article we
review the history behind these barriers to serve as an important step in initiating a conversation among organic farmers, Extension agents, and researchers.

### The Historical Context

During the 20th century, agriculture evolved to become increasingly more intensive and specialized. Advances in crop breeding and farm mechanization and the creation of synthetic fertilizers and pesticides significantly increased crop yields and labor efficiency. Between 1935 and 2000, the average yield per acre increased annually by 2.1% (National Research Council, 2010), and from 1948 to 2009 labor requirements in agriculture decreased at an annual rate of 2.5% (Economic Research Service [ERS], 2010). Many of us are aware of this history we refer to as "modernization," but are unaware that many farmers followed a separate path of development.

Indeed, almost as soon as farm modernization began, resistance emerged among farmers and groups who contested the benefits of modernization based on economic, social, and ecological principles. They saw farm "modernization" creating an economic imbalance, with greater benefits for farm suppliers, food processors, and commodity markets, and fewer benefits for farmers. They opposed the use of synthetic fertilizers and pesticides, arguing that the compartmentalized and reductionist science that developed them was detrimental to a farm ecosystem (Stinner, 2007). This contestation eventually shaped the organic farming movement whose proponents supported an alternative agricultural philosophy with a more holistic perspective. They saw the farm as an interconnected system of biological cycles creating a "balanced, yet dynamic living whole" (Scofield, 1986, p. 4). As Guthman (1998) put it, "championed by a handful of 'visionaries' and 'cranks,' organic farming eventually developed into a whole set of alternative production practices that explicitly countered trends in the industrialization of agriculture, but was regarded by most as quackery" (p. 136).

Through its association with the diffusion of innovations and "modernization," the land-grant system of research, Extension, and outreach was perceived to favor rapid adoption of new, discrete agricultural technologies without consideration given to the whole farm system, a cornerstone of organic farming. Moreover, as land-grant agents continued to promote these new technologies, their expertise and technical support for traditional agricultural practices declined and their legitimacy and credibility with organic farmers gave way to skepticism and distrust. This perceived inattentiveness pressed organic farmers to seek other information sources.

### The Development of Diverging Knowledge in Agriculture

The advent of the USDA and the land-grant university system created a new source of knowledge using scientific methods as the basis of solving a succession of problems in agricultural production (Kloppenburg, 1991; Nerbonne & Lentz, 2003). This scientific approach to knowledge focused on increasing production and efficiency, which countered and indirectly shaped many of the core values of organic agriculture.

The lack of support for unconventional agriculture from the USDA and land-grant university system led organic farmers to form alternative farming networks, creating or recreating farmer-generated
knowledge (Hassanein, 1999; Hassanein & Kloppenburg, 1995; Kloppenburg, 1991; Lyon, 1996; Nerbonne & Lentz, 2003; Padel, 2001). Organic farmers perceived the tools and recommendations from land-grant universities to be either too general, not adaptable to local ecological conditions, or incompatible with their farming systems. As a result, they began constructing their own knowledge characterized by collaborative, interactive learning rooted in social networks and grounded in specific ecological conditions. Opinion leaders in these networks were deemed experts based on their experiential knowledge gained through trial and error, rather than through instruction on the latest research.

**Encountering Different Perspectives in Agriculture**

While these two types of knowledge are by no means mutually exclusive, their encounters create tension and struggles for dominance owing to the different values placed on how knowledge is transferred and who is considered an expert. Organic farmers tend to value an iterative approach to knowledge creation in which farmers consult with one another and agricultural professionals, sharing ideas and developing a plan suited to their local farm conditions. This is different from many agricultural professionals who prefer to transfer research-based information through instruction in which farmers are passive recipients rather than active participants.

Hassanein (1999) provided an example of this in her study of two alternative farming networks in Wisconsin. She observed the negotiation and social construction of knowledge through the interactions of individuals in these farmer networks. These alternative farmers were apprehensive about associating with research and Extension faculty as they perceived their knowledge would be disregarded in the exchanges (Hassanein, 1999).

Bell (2004) explored the interactions and knowledge generated among farmers associated with the Practical Farmers of Iowa (PFI) organization and described the initial unease and tension between PFI and Iowa State University faculty, concluding that land-grant university faculty can achieve greater success if they approach farmers by using "a language that invites the participation of all potential speakers, through encouraging their response ability rather than turning them off with monologue" (p. 199).

In Ingram’s (2008) analysis of interactions between farmers and agronomist consultants, she articulated four different types of encounters based on the power each individual exerted in the interaction. She found the most successful and beneficial encounters were those where both actors were actively participating and contributing in the exchange, which she termed “facilitative knowledge exchange encounters,” and described this as:

- partnerships, where agronomists and farmers combine their experience and knowledge and jointly set objectives based on the farmers' needs. These are equitable encounters where understanding, dialogue and shared knowledge are key elements. Consultation, rather than instruction, is a central component of facilitating farmers' decisions. (p. 412)

An essential component in these interactions is trust, which is a dynamic part of all social
relationships. Trust takes several forms:

- General trust (i.e., giving someone the "benefit of the doubt")
- Trust in an individual
- Trust in an institution

Levi (2000) stated that trust is also contingent on past interactions. In addition, analysis of institutional trust held by individuals reveals that perceived "distance" is a product of frequency in past interactions (i.e., more or less interaction) and is a key component of how farmers relate to institutions. As such, organic farmers may reserve trust for a specific Extension agent or researcher but may be generally reluctant to trust the affiliated institution. In addition, perceptions of difference in core beliefs between farmers and agents, such as ideological differences, are a key component of trust (Lubbell, 2007).

Organic farmers and Extension professionals each rely on information that is supported by demonstrated results but is often from different sources. Generally speaking, organic farmers have relied on experiences and observations shared by other organic farmers who have developed or used certain practices, while Extension professionals have relied on practices that are supported by peer-reviewed scientific research. Zwickle (2011) summarized this disparity as a difference between experience-based knowledge and experiment-based knowledge. Over time, individuals develop trust in their sources of knowledge and the information they provide. As Bell (2004) explains, "the cultivation of knowledge is as much about the cultivation of trust as it is about the cultivation of truth" (p. 132). Land-grant agents must cultivate trusting relationships with organic farmers if they are to add to their knowledge.

**Conclusion**

As organic agriculture continues to expand, Extension has the opportunity to develop specialized programs for organic farmers to ensure that we serve all farmers. It is this opportunity that should press us to redefine who "the expert" is and begin to learn from our organic farmers. We can then return that knowledge with technical support tested by farmers and backed by shared experience and scientific research.

The demand for detailed knowledge of local conditions and the limitations in potential knowledge any individual possesses will require a shift in emphasis, with Extension agents fulfilling the role of educator and "agent as facilitator." The person who assumes this role will facilitate knowledge sharing through collaborative, experiential learning instead of relying solely on instruction and diffusion of current "expert" knowledge.

This article elucidates the barriers to communication with organic farmers so we can address those that may exist in our programs and more effectively begin establishing a dialogue with them. Several Extension agents and researchers have developed successful programs and collaborations with organic farmers, and we intend for this article to serve as an occasion to begin reviewing their successes and developing best practices for facilitating successful collaborations among Extension professionals.
agents, researchers, and organic farmers.

References


