In Search Of "Sustainable" Agriculture

Will We Recognize It When We Find It?

SARA WYANT

WASHINGTON, D.C.

Is your farming operation "sustainable?" The answer probably depends on who you ask.

Trying to define "sustainability" is sometimes like trying to define "beauty." I'll know it when I see it, although the characteristics and qualities that I perceive as meeting this definition may be quite different from what you admire.

On one hand, you have folks who believe that organic production is the only type of sustainable system, while others who have been practicing no-till or conservation tillage for the last couple of decades might beg to disagree. The same challenges confront those defining "beauty." Some would rate a timeless star like Audrey Hepburn as one of the most beautiful, while others might rank a more current "pop wonder," like Lady Gaga, at the top of their list.

Your perceptions will likely be influenced by age, location, education or any number of other factors. For example, sustainable practices in the rocky, clay soils of Missouri are much different than the lush fertile farmland found throughout most of Iowa.

However, this lack of clarity has not stopped a growing number of interest groups, farm organizations, food companies, and lawmakers from trying to define "sustainability" in agriculture. Like ships crossing a sea of darkness, some of these groups seem to be moving without a compass. Yet, others are implementing and enforcing new sustainability standards and pressuring others to adapt. More and more food companies are demanding that their farmer/suppliers meet a set of sustainable production principles.

Roots of sustainability

The word "sustain," comes from the Latin sustinere (sus-, from below and tenere, to hold) and can be defined as "to keep in existence or maintain" or "to supply with necessities or nourishment" The word implies long-term support or permanence, according to Webster's Dictionary.

Definitions of sustainability often refer to the "three pillars" of social, environmental and economic sustainability. Therefore, the basic goals of sustainable agriculture are environmental health, economic profitability, and social and economic equity (sometimes referred to as the "three legs" of the sustainability stool).

Sustainable agriculture was addressed by Congress in the 1990 Farm Bill [Food, Agriculture, Conservation, and Trade Act of 1990 (FACTA). Under that law, "the term sustainable agriculture means an integrated system of plant and animal production practices having a site-specific application that will, over the long term:

- satisfy human food and fiber needs
- enhance environmental quality and the natural resource base upon which the agricultural economy depends
- make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls
- sustain the economic viability of farm operations
- enhance the quality of life for farmers and society as a whole."

In 1996, U.S. Secretary of Agriculture Dan Glickman issued a Memorandum on USDA sustainable agriculture policy. It stated, "USDA is committed to working toward the economic, environmental, and social sustainability of diverse food, fiber, agriculture, forest, and range systems. USDA will balance goals of improved production and profitability, stewardship of the natural resource base and ecological systems, and enhancement of the vitality of rural communities. USDA will integrate these goals into its policies and programs, particularly through interagency collaboration, partnerships and outreach."

New report

One of the latest forays into defining this complex subject comes from the National Research Council's Committee on Twenty-First Century Systems Agriculture. They recently issued a 598-page report, "Toward Sustainable Agricultural Systems in the 21st Century" in which they basically tweeked the definition set out by Congress in 1990 with their own four goals:

- Satisfy human food, feed, and fiber needs, and contribute to biofuel needs.
- Enhance environmental quality and the resource base.
- Sustain the economic viability of agriculture.
- Enhance the quality of life for farmers, farm workers, and society as a whole.

But then the committee said these goals are basically a moving target.

"Sustainability is best evaluated not as a particular end state, but rather as a process that moves farming systems along a trajectory toward greater sustainability on each of the four goals. As such, agricultural sustainability is a complex, dynamic, and political concept that is inherently subjective in that different groups in society place different emphasis on each of the four goals."

How's that for clarity?

The NRC report goes on to say that "All farms have the potential and responsibility to contribute to different aspects of sustainability. However, the scale, organization, enterprise diversity, and forms of market integration associated with individual farms provide unique opportunities or barriers to improving their ability to contribute to global or local food production, ecosystem integrity, economic viability, and social well-being. Dramatic and continuous improvement in agricultural sustainability will require long-term research, education, outreach, and experimentation by the public and private sectors in partnership with farmers."

To ensure improvement in sustainability, the committee seemed unable to agree on a single path forward. So they proposed two tracks, which they described as "parallel and overlapping" efforts to ensure continuous improvement: incremental and transformative.

The incremental approach would be directed toward improving the sustainability performance of all farms, irrespective of size or farming system type, through development and implementation of specific sustainability-focused practices, the report notes.

This approach would be complemented by a "transformative approach" that would dramatically increase integrative research on organic and other types of cropping and livestock systems. One of the most common-sense recommendations in the report, calls for USDA and other federal and state agencies to include farmer-participatory research or farmer-managed trials as a component of their research in a way that could enhance farmers' adoption of new practices and approaches for improving sustainability of agriculture.

The committee was clearly concerned that "a large proportion of public research funding is devoted to improving productivity and reducing production costs. Only one-third of public research support is devoted to exploring environmental, natural resource, social, and economic aspects of farming practices," they noted.

Regardless of whether or not Congress takes these recommendations to heart, the push for more sustainable agricultural practices will continue. That's why you need to pay attention to the dialogue and try to get involved in the dialogure. If you don't help create your own definitions, you will risk being defined by others.

Jeanne von Zastrow, the Food Marketing Institute's Senior Director of Sustainability and Industry Relations, says that between consumers, the media, a number of advocacy groups, government and food marketers, the sustainability "train" has already left the station and is running at a fairly rapid pace.

Growers who want to participate in the global marketplace will need to keep abreast of the movement or risk getting run over. As Charles Darwin once said: "It is not the strongest species that survive, nor the most intelligent, but the ones who are most responsive to change."

To read the full NRC report, go to: http://www.nationalacademies.org . Δ

SARA WYANT: Publisher weekly e-newsletter, AgriPulse.