

Sustainable agriculture part of overall vision

Organic farming is only one part of an overall vision of sustainable development, according to Dr. Stuart Hill, Director of the Ecological Agriculture Projects and a professor of entomology at McGill University in Montreal.

Speaking at the National Farmers Union (NFU) convention in Edmonton January 19, Dr. Hill said current political, economic and agricultural systems are not sustainable and actually represent a threat to future generations.

"We are destroying our life support system, not only for people but for every other species, on a global basis," he contended. While some claim there are no limits to growth, the reality is we cannot continue to go on converting this incredibly beautiful planet into a large scale garbage dump.

Dr. Hill, who heads the only ecological agricultural program at a post-secondary institution in Canada, suggested that a process of transformation has to occur, not only in farming and the food system, but in the rest of society as well in order to avoid ecological disaster.

"We have a tendency to look for technological fixes to internal problems," he explained. We want a magic bullet. But in the long run, sustainable agriculture and sustainable development can only come from a gradual process that is ultimately aimed at redesigning what we do and how we do it. Sustainable agriculture is a philosophy and system of farming that works with nature to conserve resources and minimize waste."

First step

Organic farming, according to Hill, is really just one step along the road to sustainable agriculture. Because there is a market being developed now for organically-grown food, farmers in a transition to a sustainable future can tap into that market.

"Once you're in that market and getting a return from the marketplace for your efforts, then there's an incentive to continue on that road. But organic farming is still a long way from a true vision of sustainable agriculture."

The process of moving toward sustainable agriculture consists of three stages, stated Hill. "The first stage is an emphasis on efficiency -of targeting and reducing the level of

chemical inputs. But the thrust is still on the 'magic bullet' to eliminate problems" said Hill.

The second stage is an emphasis on substitution, where less harmful chemicals and fertilizers are used in place of more toxic substances. The third stage involves the "re-design" of the farm's production and management to work in cooperation with nature, rather than in opposition to it, he explained.

"We have to change our attitudes," commented Hill. "Weeds and other pests aren't due to a shortage of pesticides or herbicides, they're an indication of something wrong with the design of the system. You don't get a headache because of a shortage of aspirin in your blood, you're just not getting enough sleep. The answer is to re-design the pest out of the system through utilizing different crop rotations or management practices."

Working with instead of against

In a truly sustainable system, explained Hill, the emphasis is on prevention and big-ecological solutions. During the transition process from conventional to sustainable farming, Hill said farmers need information on farm design, optimal management, appropriate crop rotations, pest control and waste management strategies, markets and other information.

But he cautioned that it is a mistake to rely too heavily on the advice of so-called experts, since the best information is gained by simply paying attention to what is happening on the farm, and learning to read nature's indicators.

Hill said the movement toward ecological farming is very strong in Quebec, where an estimated 2,000 farms are certified organic operations, more than the rest of Canadian provinces combined. Still, he added, sustainable agriculture is more than just organic farming, it's a vision that takes into account ecological and social justice concerns. Agriculture, he noted, cannot be sustainable in an overall food system or economic system that rests on concentration of wealth in the hands of a few.

"There are many hidden environmental, economic and social costs in our present food system," he concluded. "We need a global transformation that starts with people becoming empowered through communication and access to information."

Source: National Farmers' Union

Copyright © 1991 *REAP Canada*