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TABLE OF CONTENTS

Selected Papers from the Conference on Science and Sustainability, Seattle, Washington, October 24-26,1993

Other Feature Articles

Departments

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Wallace Institute Information

The Henry A. Wallace Institute for Alternative Agriculture is a nonprofit, tax-exempt research and education organization established in 1983 to encourage and facilitate the adoption of cost-effective, resource-conserving and environmentally-sound farming methods. It works closely with producer groups, public research and education institutions, and government agencies in promoting a sustainable agriculture system.

Its programs include providing a national information clearinghouse, serving as a voice for sustainable agriculture in Washington, and developing and implementing research and educational outreach programs. It holds an annual scientific symposium and publishes a monthly newsletter.

The Institute is governed by a grass roots Board of Directors, which includes several commercial-scale organic farmers, and maintains a small professional staff. It is supported by memberships and donations and grants from foundations, corporations, and individuals.

Cover Photo

In northwestern Washington's Skagit Valley, focus group members and cooperating growers evaluate on-farm cover crop research as part of Washington State University's *Cropping Strategies and Water Quality Project.* Photo supplied by the Center for Sustaining Agriculture and Natural Resources, Washington State University, Pullman.

The Conference on Science and Sustainability: Its background and origins

Traditional ways of conducting agricultural research and education are rapidly changing as land-grant institutions move from a production orientation to one that includes more environmental, social, and ethical concerns. The shift from a largely rural to a largely urban population has affected public perceptions of agricultural research because most people now are separated both emotionally and physically from their sources of food.

The academic community recently has been shifting toward basic rather than applied and problem-solving research. This is due in part to the reward system's greater emphasis on publications, which discourages long-term and applied research and promotes disciplinary and reductionist rather than systems approaches.

With continuing reductions in support for agricultural research and extension, and with the land-grant mandate broadened to include environmental and social issues, farmers often feel that the land-grant institutions have let them down. As pointed out by John Ikerd ("The question of good science," *AJAA* 8:91-93, 1993), farmers tend to be more interested in applied research results that provide knowledge about specific subjects or that help solve problems. In contrast, the scientific community usually places a higher value on research that develops concepts and theories or that improves research techniques. Ikerd further notes that farmers need information that reduces their risk of making wrong *decisions*, whereas scientists may be more concerned about the risks of misinterpreting their research results and thus drawing wrong *conclusions*.

In contrast to more traditional styles of agricultural research, farmers were given a much greater role in the Low-Input Sustainable Agriculture program, which later became the Sustainable Agriculture Research and Education (SARE) program. These programs, which promoted a systems approach to research, were initiated by the U.S. Congress in response to environmental and economic concerns. In the early 1990s, the SARE coordinator for the Western region, Dr. David Schlegel, conceived the idea of a conference on "the science of sustainable agriculture" in response to some researchers' doubts about the scientific validity of research on sustainable agriculture.

After several attempts to get an institution to take the lead, CSANR at Washington State University agreed to cosponsor the conference with the Western SARE program. A planning committee was formed to develop the agenda. However, it soon became apparent that the physical and social scientists differed completely regarding the objectives, approaches, and outcomes of a conference on the science and sustainability of agriculture. The difficulties in agreeing on an agenda showed that there was more than sufficient justification for holding a conference. Therefore, we decided to focus the conference not on defining "good science" (Ikerd, 1993), but instead on presenting examples of existing research and education projects spanning the continuum from traditional, reductionist approaches to interdisciplinary, qualitative and whole system studies. We wanted to show how partnerships among university specialists can enhance the economic, social, and ecological viability of agricultural systems.

The conference had several components: keynote speakers to introduce the subject; presentations of integrated/whole farm case studies; workshops on systems research and education; and breakout sessions on institutional barriers facing interdisciplinary research and education. The projects represented a range of activities: experiment station studies of crop and crop-livestock systems, focus groups, and on-farm research. Karl Stauber of the Northwest Area Foundation gave a keynote address that challenged us to rethink our mission as agricultural researchers and to consider several models for change. Deputy Secretary of Agriculture Richard Rominger presented the evening keynote address on the role of USDA in shaping agricultural research and education.

The conference emphasized a process rather than specific products; we hoped this would distinguish it from other sustainable agriculture conferences. We did not want the type of presentation that is customary at professional society meetings. Rather, we were interested in why and how each study was designed, the participants in the process, the anticipated products, and how the results were disseminated. Several researchers talked about their frustrations in conducting systems research because of the greater time commitment required, the longer time before publishable results are obtained, the lack of acceptance of nontraditional statistics, the difficulties in deciding authorship of papers, and the risk of not getting promotions and tenure. However, most scientists were very satisfied about carrying out systems research and education because of the holistic approach and the synergies from working with people from many walks of life.

More than 200 participants from 35 states and 5 countries attended the conference. Unlike some sustainable agriculture meetings where the "choir" dominates, many people from the traditional agricultural community attended, including several land-grant administrators. The meeting gave us the feeling that many sustainability issues that were discussed are slowly becoming institutionalized, a positive sign. Most of the keynote talks and case studies are included in this issue. In addition, written documentation of the four workshops and four breakout sessions will be published by CSANR.

As Conference Chairman, and on behalf of the planning committee, I wish to thank the Henry A. Wallace Institute for Alternative Agriculture for agreeing to publish these presentations, and especially William Lockeretz for editing them. Thanks go also to conference coordinators Colette DePhelps and Norma Fuentes-Scott, the contributing authors, and the planning committee.

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