Agroecology in Action—Extending Alternative Agriculture through Social Networks


Worldwide, societies are struggling to come to terms with challenges in environmental management that are complex, contingent, and controversial. Certainly, the development of agriculture now presents such a challenge. What is to be done? One promising development is the so-called ‘learning turn’—a widely-shared perception that society must now create a collective capacity to learn across lines of difference that lie between disciplines, professions, and stakeholders.

In Agroecology in Action, the rural sociologist Keith Douglass Warner has examined the learning turn in one sector of U.S. agriculture, focusing on social networks that have formed as farmers and other stakeholders strive to develop alternative production modes. He works through a series of case studies, with major emphasis on the development of integrated pest management methods for California horticultural crops. These case studies are especially rich because they exemplify the recent ‘complexification’ of agricultural development that results when new stakeholders begin to make strong claims on agriculture. In California, these new claims have produced intense conflicts about agricultural land use, as high-value agriculture and high-value residential development have come into direct competition for valuable farmland and the resources and influence on research priorities and policy. One emergent property is especially striking: the ability to create knowledge more rapidly than the conventional agricultural R&D system based on scientific research and technology-transfer. In this light, agroecological partnerships can be seen as an adaptation by farmers and other stakeholders to rapid flux in agriculture, creating usable knowledge in situations where conventional systems simply cannot keep up with the pace of change.

He begins with an insightful summary of the debate over the environmental performance of U.S. agriculture that began with publication of Rachel Carson's book, Silent Spring, and the dynamics by which research into alternative modes of agriculture, such as IPM, gathered momentum and support among farmers, researchers, regulators, and marketers. He then develops the science-studies scholar Bruno Latour's heuristic notion of a 'circulatory system of scientific knowledge' as the basic concept for agroecological partnerships. Analysis of partnerships in California, Washington, and Wisconsin follows. A series of chapters profiles partnerships, documents their innovative practices, and documents their structural and functional attributes of effective partnerships. The focus is on California, where Warner surveys among some 32 partnerships in 16 production systems. These illustrate some notable successes, especially in California winegrape production, a conflict that has arisen as California wine grows and has rapidly expanded in recent decades, bringing vineyards in close proximity with new residential areas.

One message of the book has particular import for contemporary agriculture. Warner shows how the interweaving of systems in the social network for alternative agriculture are creating the localized, site-specific 'knowledge systems' that appear essential to the development of sustainable agriculture and the resolution of environmental conflicts.