

processes and land rather than people or operations. This price premium approach has serious consequences, Guthman argues in chapter seven. The overall effect was to narrow the range of auditable standards and limit their effectiveness in promoting long-term investments in ecological health and social outcomes. The materials list became a far-too-central arena for politicized debates about standards as well as a focus of manipulation. For example, Guthman describes a practice that violates the spirit, but not the letter of the rules: using a prohibited insect-attracting chemical just outside of a certified organic plot (p.152). Overall, the emerging standards led to an 'input-substitution' approach that fits in well with the labor, production and marketing practices of conventional agriculture.

Guthman comes full circle in the conclusion, warning that the family farm ideal, so dominant in organic agriculture discourse, is not only untrue but also unhelpful in envisioning and seeking a truly transformed agriculture. Scale is not the problem. Farmer independence is not the problem. The problem is relationships of exploitation that become taken for granted and reproduced in emerging agricultural systems. The populist agrarian vision does not, for example, raise the question of why farmworkers were not included in discussions leading to organic standards. It also does not address how the commodification of land or income inequality in American society limits the ability of organic agriculture to pursue social goals. In the final chapter, Guthman offers a few ideas for bringing the social and environmental aspects of organics into the foreground.

Guthman's argument is both provocative and persuasive, going beyond the hand-wringing that recent debates over organic regulation have prompted to offer an explanation of how and why actual existing conditions in California fail to realize the goals of the organic movement. The precise and straightforward writing style makes the key points all the more vivid. This book will likely find a home on the well-trafficked bookshelves of many activists and scholars.

My only disappointment with the book is that it does not address the counterfactual question: could it have been otherwise? By her account, it seems that standards were always about protecting a marketing category and were always driven by larger-scale market-oriented growers. Doesn't the massive growth of organics have to articulate with the pre-existing agricultural landscape? Her analysis raises a question: has organics 'conventionalized' or was it always, in a sense, 'conventional'? Was there a time when the organic label had integrity or did the very process of labeling take 'organic' from a way of life to a marketing category? This question was not Guthman's agenda, so my critique is perhaps misplaced. But nevertheless because this question is not addressed, the shape of the analysis tends to treat the conventional-alternative divide as more solid than it is. Despite my quibble, Guthman's ambitious and rigorous research adds an important empirical touchstone to an often unhelpfully abstract debate. This kind of situated analysis will help all of us understand different

perspectives as well as the common values that will lead to tangible, positive change.

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Agricultural Systems: Agroecology and Rural Innovations for Development. Edited by Sieglinde Snapp and Barry Pound. 2008. Elsevier, Amsterdam, The Netherlands. 386 p. US\$74.95, ISBN 978-0-12-372517-2, hardcover.

To welcome yet another book on sustainable development, a reviewer must look for what is unique and what adds value to the volumes already published. In *Agricultural Systems*, editors Sieglinde Snapp and Barry Pound have assembled a collection of chapters that goes beyond the usual praise and criticism of the green revolution and the focus on economic development. Their book provides a first-hand story by people with lengthy experiences in the field, especially in Africa, who have developed and tested grassroots, participatory development approaches. The result is a valuable set of principles, strategies and case studies that paint a new and feasible greenprint for development.

The first section on re-inventing farming systems describes agriculture as the heart of most developing country economies, but also a sector increasingly challenged by globalization, local poverty and pandemics such as AIDS. Improving systems will increasingly depend on innovative approaches, such as agroecology, that take into account the economic, policy and social issues in addition to the conventional focus on improving productivity. Ecological principles that relate to design of farming systems are becoming more important as we examine the complexity of rural challenges and the vital need to make best possible use of natural resources.

In a section on resources for development, four chapters delve into low-input technologies, nutrient management, decentralized plant breeding strategies and the role of livestock. Systems dependent on internal, renewable resources are more sustainable than those that require continued inputs from outside, inputs that have a high and increasing cost. Nutrient use is especially important, as we design efficient methods of cycling key elements within the farm and build toward the greatest possible complementarity among enterprises. Livestock in a mixed farming system can promote this nutrient cycling. Participatory plant breeding that is based on local germplasm and creative testing of new varieties by farmers under their own conditions can lead to better specific adaptation and secure seed supply.

Building a broader context for sustainable development is the focus of the concluding section, and includes an articulate discussion of why we should recognize and foster women's roles in development. Major sources of

innovation in the future will come from creative farmers, as well as from partnerships of researchers with farmers as equal partners in the development process. A final chapter urges adoption of a 'Green Evolution' strategy that emphasizes teams and collaboration, local solutions by local people, and engagement of stakeholders at all levels.

Agricultural Systems is particularly valuable in its practical approach to development and its focus on the role of farmers, especially women, in the process. Each chapter is supported by several case studies that direct the reader's attention to grassroots strategies that work. The chapter on animal systems is a welcome addition, since many similar books focus almost entirely on cropping

systems. As with most edited volumes, there is patchiness in treatment and quality, and at times a lack of continuity, demonstrating the challenges of putting together a coherent story when the chapters are from many different people. Yet this is a useful book, with contributions from specialists who have spent decades in the development arena. It is well written and well worth adding to your personal library and recommending as a resource for students interested in developing countries and their agriculture.

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