

academic or technical material for publication" (107). Thus the volumes remain primarily reports of project activities and experiences.

I suspect that the volumes will not be useful for practitioners either; the descriptions of the project activities are too brief and too general to be of real value. This is unfortunate, since some of the small-scale projects in rangeland improvement and water harvesting may represent promising developments. For example, DHP-Kenya provisioned small dams and water holes that last only a short time during the dry season to avoid overgrazing caused by permanent water in drylands. The DHP project in Uganda conducted rangeland improvement trials with few external inputs because these would not be economically sustainable. While the projects' small scale and grassroots approach ensured that fewer mistakes were made and their effects were not as disastrous as those of earlier top-down projects in pastoral development, in the end it remains unclear what was achieved. The editors of all the volumes *claim* success, even when there were few tangible results, but they present no evidence that allows readers to determine *how* successful they were.

Overall, I think it would have been better had the editors at the OSS-REA synthesized the results and lessons from the four DHP projects in a single volume, decided on practitioners as the audience, and focused their discussion on the lessons for future projects in pastoral development.

Mark Moritz
Western Oregon University
Monmouth, Oregon

Noah Zerbe. *Agricultural Biotechnology Reconsidered: Western Narratives and African Alternatives*. Trenton, N.J.: African World Press, 2005. x + 238 pp. Graphs. Bibliography. Index. \$29.95. Paper.

Ostensibly, this is a book focusing on agricultural biotechnology in Zimbabwe. In many respects, however, it is two books in one. The author is supremely competent to write the one on the colonial and postcolonial injustices that Zimbabwe has suffered, but for the other part—on agricultural biotechnology—he is not. His chapter on Zimbabwe's colonial inheritance is an absolute gem, succinct and to the point. This inheritance down through and including the Lancaster House Agreement is replete with injustices to the indigenous African population, and Noah Zerbe does a magnificent job of identifying and analyzing them.

Though opposed to agricultural biotechnology or biotechnology in general, he unexpectedly comes out in favor of an "appropriate" biotechnology. Zerbe seems not to know that there has been a graduate program in biotechnology at the University of Zimbabwe since 1991. Its graduates have gone on to prestigious molecular biology programs in South Africa or around the world for their Ph.D.s, and many have returned to Zimbabwe

where they are engaged in research. He could also have interviewed internationally known molecular biologists in Zimbabwe, including one who did a post-doc with James Watson quite literally at the dawn of biotechnology. To be sure, Zerbe is not alone in simply being unaware of African work on biotechnology.

In 2002, when the NGOs raised such a fuss about the dangers of biotech food for famine relief in Africa, they totally ignored a U.N. Economic Commission for Africa report, "Harnessing Technology for Sustainable Development in Africa" (August 2002), which was almost entirely about the potential for biotechnology in agriculture ("green biotechnology") and in pharmaceuticals ("red biotechnology"). There is an *African Journal of Biotechnology* in which African scholars from around the continent publish. In July 2000, the Third World Academy of Sciences joined with the national academies of science in Brazil, Mexico, India, China, and the U.S., along with the Royal Society of the U.K., on the safety of transgenic food production. Early in 2006, another report was issued by this group in which other academies of science in Africa and Asia joined in.

Today there is NEPAD Science and Technology Forum and a Biotechnology Advisory Group for the African Union. Obviously, some of these organizations were not in existence when Zerbe turned his dissertation into a book, but enough were to make one wonder why their views on biotechnology were ignored then in favor of non-peer-reviewed activists' publications—and why they are still ignored. Since Zerbe is interested in practical uses for agricultural biotechnology, why did he ignore "Agricultural Biotechnology: Meeting the Needs of the Poor? The State of Food and Agriculture 2003–2004" (FAO, Rome, 2004), along with the earlier UNDP Human Development Report arguing for the potential of biotechnology to meet the needs of the poor. Over the last few years there have been any number of meetings on biotechnology in Southern Africa and Africa in general with participant scientists from Africa and around the world. There have been so many scientific reports in favor of biotechnology by national and international scientific organizations that one questions the claim that there is controversy on this issue among scientists.

Zerbe's insistence that GM crops are not suited to the needs of small third-world farmers is contradicted by the fact that the fastest current growth in GM crop plantings is with smallholders in developing countries (though planting by acreage or hectare is still greater in developed countries) and this group constitutes the largest number of farmers planting transgenic crops (19). Zerbe further maintains that the major GM crops—cotton, maize, and soybeans—are not appropriate to African smallholders. Hybrid maize or corn has become one of the most widely grown crops in Africa. Zerbe's argument is that there is Bt yellow corn while in Southern Africa they eat only white corn (81–82). GM white corn has been grown in South Africa since the 2001–2002 season; the fact that he claims to be "relying on data gathered before 1998" (20) for this study focusing on Zim-

babwe is no excuse for not noticing obvious data that contradict his assertions made in a book published in 2005.

Zerbe likens the biotechnology potential to what happened in the Green Revolution. His rendering of the Green Revolution is grossly at variance with the facts and is largely without supporting citations. There are so many major errors of fact about both agricultural biotechnology and the Green Revolution in this small book that I cannot even begin to cover them. Consequently, I will post a list of some of his most egregious errors of fact on my Web page (www.uh.edu/~trdegreg) following the publication of this review.

In many ways, I hate to be so critical of Zerbe since he has done an enormous amount of research in a diverse number of areas. Unfortunately, for too many critical topics such as biotechnology and the entire exposition on the Green Revolution, he relies on non-peer-reviewed literature written by ideological soulmates which are factually in error on virtually every point. Where Zerbe lacks facts, he simply fills in his own based upon an ideological framework that tells him what they should be and not what they are.

Thomas R. DeGregori
University of Houston
Houston, Texas

Peter Gibbon and Stefano Ponte. *Trading Down: Africa, Value Chains, and the Global Economy*. Philadelphia: Temple University Press, 2005. 272 pp. Notes. Bibliography. Index. \$21.95. Paper.

Trading Down is a revolutionary text about agriculture in Africa. Based on the concept of the “Global Value Chain” (GVC), it moves the Africanist researcher away from the traditional center of attention—country studies—and focuses instead on certain key crops and their international trade. The perspective shifts from the world of GATT and Produce Marketing Boards to the post-1994 scenario of the WTO and contemporary production and exchange in a neoliberal and globalized world, with retail trade becoming increasingly international. In Africa, in this new world, there are both winners and losers.

The title arises from the disintegration of African trade in most of its primary exports (cotton is the exception) as the continent is excluded, marginalized, and made vulnerable. The book’s investigation is based on the solid ground of empirical research on agro-food products and labor-intensive manufacturing (citrus, coffee, cocoa, cotton, fresh vegetables, and clothing). The information arises from the Danish Institute for International Studies and its Globalization and Economic Restructuring in Africa research program. The authors recount in great detail how the world’s economy and trade regimes have been altered through the opera-