

Book Reviews

Leslie Lipper, C. Leigh Anderson and Timothy J. Dalton (eds), *Seed trade in rural markets – implications for crop diversity and agricultural development*. London: Earthscan Publications, Price £29.95, pp. 224, ISBN 9781844077854

This is a timely and insightful book on the role that markets play in seed accessibility, conservation and innovation. The authors note that many of the policies that have governed access to seeds are based on a long-held view that a seed system follows a natural development pathway from farmers' production to government involvement towards a perfectly competitive private seed market. However, this is only appropriate for a relatively small share of crops and farmers. A broader view of a seed system provided by the book, which includes various forms of markets, as illustrated by the five cases in the book, is therefore extremely valuable.

The book consists of three parts. The first part sets the stage with chapters on agricultural markets and utilization of, as well as access to crop genetic resources, and the project methodology. The second part forms the heart of the book and describes five cases. Part three provides a synthesis which discusses markets, seed systems and crop diversity and a conclusion that offers some policy recommendation.

The five cases include sorghum and millet seeds in Mali, potato seeds in Bolivia, pigeon pea seeds in Kenya, small millet seeds in India and maize seeds in Mexico. The cases provide a range of different locations and seeds, but all include seeds of crops that have an importance for food security, have a significant level of local genetic diversity and reveal some market integration. Not all cases follow the value chain analysis approach sketched out in the beginning, use consistent terminology (such as market-shed) or use similar measures to assess crop genetic diversity. This is a bit confusing at times, but a minor complaint. They do all address the question of how the characteristics of local seed markets affect the price, availability and information about crop genetic resources exchanged.

Although farmer-saved seeds are still the most important source, the cases show that markets are also an important seed source across countries, especially after a severe drought or another calamity. The cases show

a huge diversity of markets and traders, which results in a diversity in access to crop genetic resources across local markets within a country. The cases demonstrate the role of local markets as a crossroad for the formal and informal seeds' sectors and in increasing farmers' access to a wider range of materials at affordable prices. The authors point out that official seed policies and regulations in place may occasionally hamper this role of local markets in the seed system. A major limitation of local markets is the lack of information about the type of seeds sold, which is not always apparent from its appearance or variety name. The authors therefore suggest a priority for policy to address these information failures, e.g. by removing barriers to information exchange that current policies and regulations may generate, certifying sellers rather than seed or developing a wider range of seed certification.

Gerdien Meijerink

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Robert J. Henry, *Plant resources for food, fuel and conservation*. London and Stirling, VA: Earthscan Publications, Price \$79.95, pp. 182, ISBN 9781844077212

This volume sports a beguiling title in a time where, rightly, a deal of public angst is directed towards the uncertain future of environmental conservation in the face of projected climate change and the remorseless growth of the human population. The case needs hardly to be made that our existence has always been, and will no doubt continue to remain into the future, reliant on the plant kingdom's provision of much of what we eat, clothe ourselves with, use to protect ourselves from the vicissitudes of the weather and exploit to maintain our health. This reviewer understood from the title that the intent was to project an informed view of the possible changing, but no doubt enhanced role of plant resources in sustaining our quality of life, but was disappointed to find that much of the book's content is trite, superficial and repetitive. The role of DNA technologies in plant

genetics and breeding is repeatedly, if rather uncritically, referred to, but oddly, in a book which purports to have a prospective, rather than a retrospective focus, there is not a single mention of genetic modification, either in a positive or in a negative light. Genetic modification may be controversial in some circles (which perhaps includes the publishers of this volume), but it is hard to imagine that attempts will not be made (as indeed has already been pioneered by the modification of poplar lignin) to exploit it to achieve the sort of re-engineering of plants into second-generation sources of biofuels, as covered at some length in the book.

What struck this reviewer was a lack of clarity as to the nature of the audience that the author believed he was addressing – at times, he seems to assume that the readers have at best only a rudimentary knowledge of biology, in producing statements such as ‘plants store carbon mainly as carbohydrates’, and at others, he seems to assume that rather they enjoy quite a specialized knowledge ‘the burning of plant residues may generate biochar...’ This lack of focus is uncomfortable throughout; but on top of this, the text is littered with simple errors, such as the suggestion that 10 kcal is equivalent to 42 GJ (a few orders of magnitude wrong!), or that the form of Asian rice known as *javanica* (i.e. from

Java) can be variously called – within a few lines! – either *javonica* or *jarvonica*. With a mountain of syntactical errors and omissions of relevant facts too numerous to recount, the text has the distinct air of having been hurriedly cobbled together from other bits of writing. Most curiously of all, the author – by his own admission – has chosen to be selective of the burgeoning relevant literature, both scientific and quasi-scientific, in preferring to draw on his ‘personal experience ... and ... examples of research in which [he] has been involved’. The inference of such a preference in a volume which projects itself as a global overview of the future role of plant resources is that the author hardly trusts what others in the field have achieved, researched or explained. As a result of this unexpected parochialism, in combination with the manifest carelessness which infects the text, this reviewer was led to increasingly question how well-founded many of the author’s views really are.

In the end, the volume may find a market amongst a lay or politically committed readership (perhaps this was the idea?), but is unlikely to create much of a ripple amongst the scientific community of practitioners of plant genetic resources.

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