In an era of rising labour costs, falling availability of water and increases in the gaseous emissions implicated in global warming, the book looks at the considerable benefits from the use of biotechnology to ameliorate such problems.

I have a few minor quibbles, e.g. the questionable percentages on increases in the growth of Bt-modified GM cotton (p. 8), and would like greater clarity on cost savings in Table 2.6, but these do little to detract from an excellent book which is a must for all interested in the GM debate.

W. H. McFarlane Smith

DNA Banks – Providing Novel Options for Genebanks? M. C. de Vicente and M. S. Andersson (Eds). Rome: IPGRI (2006), pp. 84, $10. ISBN-13: 978-92-9043-702-4. doi:10.1017/S0014479707005467

This book draws on a workshop to consider plant and animal DNA banks organized by Biodiversity International, then IPGRI. One chapter also presents the results of a survey investigating the application of DNA methods in genebanks worldwide. By the time of the survey in 2004 only 20 % of collections were storing DNA, with many more aspiring to do so. In Chapter 3 the complementarity of living and DNA collections is explored. DNA or preserved tissue archives for research with a molecular focus are particularly useful for material which is difficult to maintain in living form. This chapter strays beyond the topic to discuss genome sequencing projects. In Chapter 4 platforms for DNA storage are explored. DNA often outlasts the individual associated with it, sometimes by many thousands of years, but in many types of archived tissue DNA is seriously degraded. In this context the cited useful storage life of DNA for PCR of 4–7 years at −18 °C is often less than the life of conventional seeds in the same conditions. In additional chapters, introductions are given to the role of bioinformatics, DNA banks as tools for conservation genetics, animal genetic resource DNA banks and models for the interaction of international centres and nodes in DNA banking. The need for novel means of DNA storage is raised, including in dry form on paper, but this useful book limits itself to a broad overview rather than cover the detailed technical aspects of DNA banks.

Gavin Ramsay

Agricultural R & D in the Developing World. Too little, too late? Edited by P. G. Pardey, J. M. Aston and R. R. Piggot. Washington DC: International Food Policy Research Institute (2006), pp. 398, no price quoted. ISBN 0-89629-756-X. doi:10.1017/S0014479707005479

This book is full of policy and institutional details regarding agricultural R&D in the developing world. Stock-taking of what is happening in less-developed countries is based on nine case-study countries across Asia, Latin America and Africa, providing extensive descriptive information on the history and current status of the national agricultural research systems, although not enough use is made of the information in terms of a strategic assessment. Despite a generally positive analysis of the CGIAR's past efforts to provide agricultural R&D, the conclusion regarding its current state is that the CGIAR is in need of 're-engineering. The main conclusion is an obvious one in that given the continuing shift in the balance of global agricultural investments away from the developing regions, the countries of the South will have to become more self-reliant in the development of agricultural technologies, as is already occurring with the largest developing countries.

The book represents a heroic attempt to rationalize the evolution of agricultural R&D from a mainly economic perspective. The sub-title 'Too little, too late?' is not seriously addressed as no attempt is made to define what is adequate and timely. There is an assertion running through the book that agricultural R&D offers a *sufficient condition* for agricultural development, which is often not the case. Also, the discussion and conclusions appear to be trapped within the limits of the 'genetic ghetto' mindset. In reality, agricultural R&D plays a much broader and exciting social, economic, ecological and environmental role in national and international development than is implied in the book. This notwithstanding, the book should appeal to a wide audience.

Amir Kassam

Demand for Products of Irrigated Agriculture in sub-Saharan Africa. By P. J. Rodell, M. Westlake and J. Burke, Rome: Food and Agriculture Organisation of the United Nations. (2006), pp. 127 pages, US$45.00. ISBN 92-5-105581-5. doi:10.1017/S0014479707005480

This report, prepared by FAO consultants and staff, reviews the contributions which 'irrigated production' can make to food security and economic growth in sub-Saharan Africa. Five international organisations – the