

between unimodal and bimodal rainfall regimes, which is very important in West Africa and determines the geographical limits of the cocoa and oil palm belts and the forest fringe. Some conceptual models for vegetational and soil processes and their interaction are discussed, but the author bypasses the attempts in the last few decades to adequately quantify such processes, which can help to predict the long-term effect of soil mining and land use intensification under the fragile conditions of the (humid) tropics. Although important literature sources are missed, the book presents a useful encyclopaedic overview of shifting cultivation in three continents, including current concerns about land grabbing and the dangers of injudicious large-scale land use. The book is recommended as an introductory college text.

Henk Mutsaers

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Europe's Green Revolution and Others Since: The Rise and Fall of Peasant-Friendly Plant Breeding. By J. Harwood. Routledge: London (2012), pp. xviii + 269. £85 (hardcover), ISBN: 978-0-415-59868-2.

Harwood's well-researched analysis of various 'Green Revolution' programmes from 1870 to 2011 summarizes why some failed and others were apparently more successful. Success is largely attributed to public-funded research and development, especially plant breeding which focused on the needs of small peasant farms and developed varieties of crops that were better adapted, more sustainable and higher yielding, than those from the private sector.

This excellent book should be read by all those concerned with poverty alleviation in developing countries, particularly donors, agricultural scientists at the CGIAR centres and those with similar responsibilities at the World Bank, NGOs and like development organizations.

Harwood's arguments are largely based on historical evidence from farms in southern Germany between 1870 until 1945. He demonstrates clearly that peasant-friendly plant breeding was a better model for poverty alleviation than those developed by private sector breeders. However, he admits that both institutional dynamics and politics played a major role in decision-making and the subsequent impact on resource allocation.

Harwood is to be congratulated on his clarity of thinking, particularly in pointing out the contradictory actions of the World Bank and other short-sighted decisions, for example, those taken by Thatcher's government in the early 1980s, in closing PBI at Cambridge, UK.

Two criticisms; maps showing the changing boundaries of Germany during this period and the location of the German plant breeding stations referred to would be very helpful. Finally, the publisher's price tag puts this book beyond the reach of many potential readers.

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Invasive Plant Ecology and Management: Linking Processes to Practice. Edited by T. A. Monaco and R. L. Sheley. Wallingford, UK: CABI (2012), pp. 216, £75.00. ISBN 978-1-84593-811-6.

This multi-authored book aims to show how an understanding of ecological processes can be used for invasive plant management in semi-arid ecosystems. Despite this apparent focus on semi-arid wild lands, the ecological principles outlined by the authors are broadly applicable. Indeed, the book elaborates on how invasiveness of species can be explained by plant traits like dispersal, establishment and response to disturbance, how the environment, and management of the environment, affects invasive plants and how invasive plants in turn affect their environment – mainly the soil conditions – to benefit their own performance. Successfulness of strategies to reduce this performance, argue many of the authors in principle, increases when all these characteristics, processes and mechanisms that render plants invasive, or an ecosystem susceptible to invasive species, are considered. The authors provide guidelines for such successful management strategies as well as for restoration – through revegetation – of ecosystems that are affected by an invasive species. The book is divided in two parts – 'assessing ecosystem processes and invasive plant impacts' and 'principles and practices to influence ecosystem

change' – each composed of five sparsely illustrated and densely but clearly written scientific chapters that could be read independently. Coherence could have benefited from a general introductory and a concluding chapter, highlighting and linking the most important points. With this book, the editors nevertheless delivered a valuable contribution to the existing literature on this topic that could serve a range of professionals and students with a broad interest in plant ecology and ecosystem management.

Jonne Rodenburg

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What is the Matter with African Agriculture? Veterans' Visions between Past and Future. Edited by J. W. Mutsaers and W. M. Kleene. Amsterdam: KIT (2012), pp. 383, £24.50 (paperback). ISBN 978-94-6022-178-1.

With rising world population, climate change and ongoing land degradation, there is growing disquiet about the future adequacy and security of food and water supplies. From the title, some may assume that in Africa its smallholder farmers are 'the problem'. The editors are to be congratulated on producing this relevant, timely, informative book which shows that, in contrast, Africa's family farmers should be acknowledged as the core of 'the solution': but they have seldom been served well by the institutions – both national and international – which have presumed to be improving African farming.

To 40 willing authors – African and European, with a wide variety of technical backgrounds and with long and varied experience within the last 50 years in both Francophone and Anglophone countries of Sub-Saharan Africa (SSA) – the editors posed three questions:

'If it is true that agricultural development in Sub-Saharan Africa since 1960 has largely failed,

- *What has gone wrong?*
- *Can we identify the causes of failure, as well as the factors responsible for the fewer successes?*
- *What is needed to help African agriculture move forward in coming years?'*

Part I provides the historical and contemporary context, Part II presents the veterans' contributions and Part III provides the editors' synthesis and analysis of the writings.

The book not only exposes uncomfortable truths but also indicates how governments and other agencies – by learning from past mistakes, and by collaborating effectively with farmers to address their real concerns – should better assist African agriculturists in raising and realizing their potentials.

Francis Shaxson

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Agricultural Development in China and Africa. By L. Xiaoyun, Q. Gubo, T. Lixia, Z. Lixia, J. Leshan, G. Zhanfeng and W. Jin. Abingdon, UK and New York, USA: Routledge (2012), pp. 310, £60.00. ISBN978-1-84971-388-7.

This book examines agricultural development from a Chinese perspective and aims to aid the process in Africa. Comparing one centrally planned economy with 54 diverse African countries gives an insight into the Chinese developmental mindset. While China from the 1950s has deliberately developed its agriculture and extracted surplus from it to fuel its industries, Africa has generally failed to feed its population or to stimulate industrial growth.

Africa is now determined to stimulate agricultural growth and can learn from the Chinese experience, which feeds 20% of the world's population from 9% of the world's arable land. The Green Revolution resulted in rapid development in China but largely by-passed Africa. Other disparities include the slave trade, HIV/AIDS and colonisation, which have had negative impacts on Africa's ability to feed itself despite the abundance of land. Chinese national development policies emphasise food security and have invested to achieve that. Africa