## BOOK REVIEWS

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