late 18th century – he was not put off by lack of a computer. A section on the non-linear behaviour of some models might have been included: predictions can be affected by the choice of either temporal or spatial time scales over which to average inputs. I nevertheless recommend the book.

Bruce Marshall

Monitoring and Evaluation of Soil Conservation and Watershed Development Projects. Edited by J. de Graaf, J. Cameron, S. Sombatpanit, C. Pieri and J. Woodhill. Enfield, NH, USA: Science Publishers (2007), for World Association of Soil and Water Conservation, pp. 532, US$69.50. ISBN 978-1-57808-349-7. doi:10.1017/S001447970800690X

This volume is not a handbook but, drawing on experiences from a number of projects, it is thought provoking at several levels: the aims of monitoring and evaluation (M & E), its forms, methods, outcomes and uses. The Introduction provides a useful guide to the structure of the book, whose four parts cover 'Principles of M & E Projects' in Soil Conservation and Watershed Development (SCWD) (five papers), and 'M & E in Practice' (seven papers). These provide interesting comparisons across a wide geographic spread, a variety of projects and a range of their approaches to M & E. In the Epilogue the editors have identified five future challenges based on the authors' conclusions. Two authors independently indicate that monitoring should be asking: 'Are we doing the project right?', while evaluation should become an iterative process alongside each monitoring, asking: 'Are we doing the right project?', and – if honest – may produce some uncomfortable answers. One author cogently urges a rethinking of M & E's dominant paradigm, pointing out that the technical information and external accountability-oriented approach needs to be supplanted by an actor-specific learning approach, since it is people's perceptions of benefits that count. This reviewer challenges assumptions commonly lurking in the 'soil conservation' paradigm: what happens if we transform 'soil and water conversation' to 'water and soil conservation'? It changes project conceptualization, with repercussions for design and M & E of many soil conservation and watershed development projects. (The response to this is apparent within *No-till Farming Systems*†, also published by WASWC a few months later than this book!).

Francis Shaxson

The Water Encyclopedia: Hydrologic Data and Internet Resources. Edited by P. Fierro, Jr and E. K. Nyer. Boca Raton, FL, USA: CRC Press/Taylor & Francis (2007), pp. 1880, US$249.95. ISBN-10: 1-56670-645-9, ISBN-13: 978-1-56670-645-2. doi:10.1017/S0014479708006911

This weighty encyclopaedia has been compiled largely by a team of scientists and engineers from the consulting and engineering company ARCADIS G&M, with the main editors having backgrounds in hydrogeology and environmental engineering. Some 1100 tables and 500 figures provide the bulk and contain data arranged under the following chapter headings: data management, international data collection, climate and precipitation, hydrologic elements, surface water, groundwater, water use, water quality, wastewater, environmental problems, water resources management, agencies and organisations, and constants and conversion factors.

By far the greatest fraction of these data relates to the USA, where the book will be of greatest value. As a test, the reviewer sought out information on hydraulic roughness and classical soil properties and was largely disappointed. In contrast, there are voluminous data tables that many international water scientists will regard as parochial. Because the compilation relies on a multitude of published sources, data records may be a decade or more out-of-date, reflecting their original date of publication. The mix of imperial and metric units, reflecting the original published sources, is a further distraction; the chapter on constants and conversion factors can be useful and even embraces the Miner's inch as a unit of flow measurement and its variation across North America.

Importantly, the breadth of data accessible in one place in hard copy form will mean that most will discover some gem of interest when browsing the book for the first time. One must also respect the painstaking work such compilations of data involve.

The very existence of data encyclopaedias as printed publications is clear1y being called into question in an internet age. This is apparent in the editors' introduction and the inclusion, in this 3rd edition, of opening chapters on data management and international data collection with discussion of metadata and Internet data access. Many of the tables would be of more practical value in digital form to support exploratory data analysis

†Goddard T., Zoebisch M. A., Gan, Y; Ellis, W., Watson A. and Sombatatpunit, S. (Eds) (2008). *No Till Farming Systems. Special Publication No 3*. Bangkok: World Association of Soil and Water Conservation.

investigations. To this end the Internet address of the data source, if available, is given and a companion web site with hyperlinks to some datasets is promised. The main depository for this type of book must be the reference section of libraries to which this reviewer's copy is destined.

Robert J. Moore

Sustainable Poverty Reduction in Less-favoured Areas: Problems, Options and Strategies. Edited by R. Ruben, J. Pender and A. Kuyvenhoven. Wallingford, UK: CAB International (2007), pp. 472, £85.00. ISBN 1-84593-277-3. doi:10.1017/S0014479708006923

Forty percent of the world's poorest people depend on agriculture in areas with 'fragile resource bases and/or limited access'. With the growing recognition that agriculture can reduce poverty, support economic growth and protect the environment, this book is a valuable presentation of research studies conducted in Africa, Latin America and South and East Asia.

The chapters cover development strategies; resource management options; livelihood and food security strategies; the essential roles of markets and institutions and strategies and policy priorities. It is a reference text and rich quarry of original data, analyses and conclusions. For the busy reader there is a helpful introductory chapter, which serves as an executive summary. There are useful abstracts at the beginning of each chapter.

The authors offer no easy solutions or panaceas, nor should they! The 'less-favoured areas' are and will continue be a challenge not only for those who live in them, but also for those in the development community who seek to improve the livelihoods of those who do. The options and opportunities will differ in Asia, Africa and Latin America. The overall message is that solutions lie in a combination of policies and technologies which must be locally based. Better policies and more able institutions have essential roles to play and greater use could be made of agroforestry, soil nutrient management, crop protection, better water management, increased use of livestock and pasture management, and crop improvement through seed, breeding and biotechnology. They conclude that more long-term research is needed.

Andrew Bennett

Thin on the Ground. Land Resource Survey in British Overseas Territories. By A. Young. Stanhope, UK: The Memoir Club (2007), pp. 230, £14.50 (paperback). ISBN 978-1-84104-175-9. doi:10.1017/S0014479708006935

This book is a comprehensive survey of the investigations into soil and land resources undertaken by members of Colonial Departments of Agriculture and later by members of the organisations that were created to provide help to the newly independent colonies. The early work of Colin Trapnell in Northern Rhodesia (now Zambia) is sympathetically reviewed. Hugh Bunting (lately Professor of Agricultural Botany at Reading University) described Trapnell as 'One of the giants who strode over Africa in yesteryear' and the author describes him (with Milne) as the 'greatest tropical field scientists of all time'. The Colonial Office got Trapnell to train 12 ecologists/soil scientists who later continued with similar work in East and West Africa. Trapnell also established a fund at Oxford University to train African ecologists and soil scientists: this fund is still active to this day.

Professor Young does not only detail the surveys undertaken and the organizations involved (the Land Resources Development Centre made 'the greatest contribution to geographical knowledge produced by the United Kingdom') – he also considers what use was made of the investigations and what were the benefits.

The scientific advances made in the field of resource surveys and development planning after the Second World War are also scrupulously reviewed. Over 80 scientists were consulted and the results ordered under the following headings: Setting the Task; Preparing the Ground; East Africa; West Africa; Biographical Interlude; Central and Southern Africa; Nyasaland-Malawi; The West Indies and Central America; South Asia; South-East Asia and the Pacific; Maps, Rocks, Climate, Plants and Land Use; Soil Erosion and Conservation; Retrospect: the Surveyors; and Retrospect: the Surveys.

This remarkable and valuable book is a key source of references (over 370 citations) for anyone concerned with third world development.

Martin Brunt

For Listing only

Management of Nematode and Insect-Borne Plant Diseases. Edited by G. Saxena and K. G. Mukerji. New York and London: The Haworth Press/Taylor and Francis Group (2007), pp. 290, US$00.00. (paperback). ISBN 978-1-56022-135-7.