

specially treating north-west Europe, most of the principles and processes elucidated will apply to at least the temperate zones of the Earth.

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Reconstruction Following Disaster, Edited by J. EUGENE HAAS, ROBERT W. KATES & MARTYN J. BOWDEN. The MIT Press, Cambridge, Massachusetts, and London, U.K.: xxxv + 331 pp., figs & tables, 23 X 14.7 X 2.5 cm, paper cover [mimeogr., no price indicated], 1977.

Classical ecologists, perhaps, find it difficult to include disaster among their areas of preoccupation. Maybe this is because natural disasters are treated as God-given facts, or because they are considered beyond the scope of traditional disciplines. Increasingly, however, we are confronted with the potential threat of ecodisasters (see, for example, the International Conferences on Environmental Future held in Finland in 1971 and Iceland in 1977). Increasingly, also, it is realized that natural disasters such as floods can often be triggered by human activities which disturb the ecosystem (for example, the recent major floods in India, which have cost so much in human lives), and finally, perhaps, there is increasing awareness that environmental impact and ecological disturbance can occur as much, or even more, from rare events of great magnitude than from the daily 'insult' of Man-made activities.

It is therefore particularly instructive that the MIT Press Environmental Studies Series should have published this book which details the disasters of floods and earthquakes that have struck Rapid City and San Francisco in the conterminous United States, Anchorage in Alaska, and Managua in Nicaragua. The analysis of the impact of such disasters, and the reconstruction and rehabilitation efforts, have many lessons for the management and abatement of environmental impacts of less spectacular origin.

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Energy: The Solar Prospect, by DENIS HAYES. (Worldwatch Paper 11.) Worldwatch Institute, 1776 Massachusetts Avenue NW, Washington, D.C.. 20036: 79 pp., 21.7 X 14 X 0.5 cm, paper cover, US \$2, 1977.

Redefining National Security, by LESTER R. BROWN. (Worldwatch Paper 14.) Worldwatch Institute, 1776 Massachusetts Avenue NW, Washington, D.C. 20036: 46 pp., figs, 21.5 X 14 X 0.4 cm, paper cover, US \$2, 1977.

Energy for Development: Third World Options, by DENIS HAYES. (Worldwatch Paper 15.) Worldwatch Institute, 1776 Massachusetts Avenue NW, Washington, D.C. 20036: 43 pp., 21.5 X 14 X 0.3 cm, paper cover, US \$2, 1977.

The Worldwatch Institute, in Washington D.C., is much preoccupied with the relationship between energy and environment, as is exemplified by such samples from their excellent series of Worldwatch Papers as the following:

No. 11—'Energy: The Solar Prospect', which provides a well-referenced and balanced survey of this subject;

No. 14—'Redefining National Security', which relates ecological deterioration, climatic modification, and global food supply, to the connection between energy and environment; and

No. 15—'Energy for Development: Third-World Options', which treats the issue in those areas where it is manifest in its most acute form, namely the Third World.

It is significant that the first Worldwatch Paper of all was 'The Other Energy Crisis: Firewood', which became a classic in the area of the interaction between energy and ecology. In brief, all the Worldwatch Papers are to be highly recommended.

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Food, Climate, and Man, Edited by MARGARET R. BISWAS & ASIT K. BISWAS. (Foreword by Mostafa Kamal Tolba.) John Wiley & Sons, New York—Chichester—Brisbane—Toronto: xxiii + 285 pp., figs & tables, 23.5 X 16 X 2.1 cm, [no price indicated], 1979.

The foreword of this informative book introduces the concept of 'development without destruction', which is related to ten points concerning strategies to increase food production. The book itself has ten chapters, by ten experts who elaborate on that latter theme.

The first chapter presents the challenge of modern climatic events (those of 1972, for instance) and the need for wider use of climatic information among decision-makers—from the individual farmer to international grain-traders. In contrast, the last chapter (the 10th) speculates on the future of Man, his penchant for know-how rather than know-what, and his need to accept a global responsibility for improving 'the human quality'.

In between these general views that commence and end the book there is a wealth of data, enlightening information, and analysis, on the primary areas related to food production. Chapter two presents development strategies and is mainly concerned with 'developing' countries where food problems may be critical and improvements, all too often, are institutionally constrained. Chapter three discusses water resources, stresses the difficulties of technology transfer, and deals with the needs for reducing pollution and for better management. Chapters four and five consider energy and agriculture for food production, covering energy needs, use, and conservation, in some detail.

Chapter six deals with the environment as a whole and illustrates the dangers of seeking to alleviate a food problem in isolation without due regard for the full web of environmental and ecological interdependence. Chapter seven reviews soil reclamation and shows the vital importance of proper land-use planning. It stresses the great potential of the arid zones of the planet—the need to stop desertification and fully evaluate the problems along with the great benefits of irrigation. Chapter eight reviews local climatic problems at some length, is slightly behind the most recent ozone layer results, and is *au courant* on the potential, for climatic change, of increases in atmospheric carbon dioxide. Chapter nine then surveys the general role of climate in agriculture and economic development,

I enjoyed this book. It is well organized and well written. It contains ideas and concepts for the generalist and data and questions to challenge the specialist. A