

BOOK REVIEWS

FORESTRY IN A GLOBAL CONTEXT

by Roger Sands

CABI Publishing, Wallingford, United Kingdom.
2005. 272 pages. ISBN 0-85199-089-4. Paperback. £25 (US\$50)

This textbook was written to introduce forestry students (and others in natural resource management) to the world of forestry. Drawing on a wide range of sources, the book comprehensively presents a historical and international perspective of forestry with emphasis on the relationship between people and forests. Sands makes a real effort to present and analyse conflicting arguments and presents a very balanced approach.

The first chapter — **A history of human interaction with forests** — begins with the evolution of plants, forests, and humans. The move from hunter-gatherers to settled agriculture increasingly resulted in permanent deforestation. A large quantity of wood was essential to earlier civilisations. It is estimated that about 90% of that wood was used as fuel, especially for metal smelting and pottery. Wood harvesting was almost always destructive. Forests were even destroyed in war to deprive the opposing population of wood. The loss of accessible forests (and poor soil management) contributed to the decline of earlier civilizations. There are detailed accounts of deforestation in the Mediterranean. Because of overgrazing, especially by goats, that deforestation remains. There follows a history of forestry in the rest of world, especially in Europe, and the signs of an increasing awareness of the need for forest management.

Then follow chapters on:

The forests of the world, including the factors influencing the type and distribution of forests;

The environmental values of forests (water, soil, biodiversity);

Forest products — this begins by advocating the environmental advantages of using wood. Then wood is evaluated as an energy source (including the conversion to charcoal, ethanol, and producer gas — carbon monoxide). After a discussion of biomass production, there is a brief examination of wood properties and solid wood use. The chapter concludes with a summary of non-wood forest products (nuts, mushrooms, bushmeat, medicinal plants, resins, cork);

Deforestation and forest degradation in the tropics discusses the conflicting pressures of development *versus* conservation, and the need for agricultural land, as well as corruption and other factors contributing to the degradation;

Sustainable forest management — this has changed from the objective of sustaining wood production to sustaining an ecosystem. An evaluation of forest certification is included. There is also discussion of the carbon question and climate change (and especially the role of forests and the Kyoto Protocol);

Forest plantations — although Sands attempts to define plantations there are obvious problems of interpretation. FAO defines plantations as “forest stands established by planting or/and seeding” with “either introduced or indigenous species”. However, the table (based on FAO data) listing plantation areas by country excludes Sweden, Germany, and France. On FAO’s definition of plantations these countries must all have in excess of a million hectares of plantations. Also, plantation area totals tell us little about potential future production. For instance, the 5 million hectares of Brazilian plantations may produce far more wood volume (and sooner) than the 45 million plantation area claimed for China. There is a very balanced discussion of the pros and cons of plantation establishment.

Social forestry — even though all forestry is probably social forestry, this chapter is limited to community and urban forestry, and to agroforestry. Included are several case studies from India, Nepal, Europe, and Australasia.

The book has brought together a wealth of information and is a comprehensive summary. As such it provides an introduction for forestry students to the world of forestry. It is readable but a glossary of terms may have helped. There are simple and informative tables, graphs, and diagrams. Although there are two sets of global maps, there are no detailed maps (a map of ancient Greece and the Mediterranean would certainly have helped with reading of the first chapter). Apart from only one set of scanning electron micrographs of wood structure, there are no other pictures.

The book starts well by discussing the early history of the destruction of forests and the need for, and the early attempts at, forest management. However, we then have a snap shot of forestry as it is in the early twenty-first Century. With time this review will become increasingly outdated.

The book attempts to balance controversial aspects by presenting both sides of an argument. Often there is no resolution. Perhaps it is this attempt at fairness, but the book generally fails to present forestry as an exciting and challenging profession.

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