

Whether that pessimism is justified depends on one's point of view: the Government of the time would argue that the target was not forestry, but an over-blown and constipated public service (of which the Forest Service was just a part) and a national culture of dependence on central government which had plunged New Zealand deeply into debt.

However that may be, the changes were, for foresters, radical in the extreme, going against all their historical experience of public pressure on forested land for settlement and political indifference. Their reception was not helped by the 4th form enthusiasm with which some of the more vocal politicians put down forests and forestry in their pursuit of the green vote.

"Tomorrow's Trees" was published in 1992, when forestry was rising from the ashes of political ridicule and the economist's level playing field, but it would have been written earlier at a much more gloomy time when there was every good reason for pessimism.

Most foresters will remember the early days of the State plantation sale process, put together in such haste and in such a fashion that only the very largest New Zealand companies would have the resources to bid, then finding themselves apparently checkmated by the Commerce Commission.

They will remember also the indifference with which the Government of the day regarded the possible sale overseas of the whole State plantation estate and the real possibility that it might be stripped and abandoned; there was nothing to show that political appreciation of the value of forests had grown over the past 100 years and that forests were not, once again, simply to be a mine of capital to be used to bail the nation out of its economic woes.

But things have turned out better than that, and forest products face a more certain future than almost anything else we grow, though it seems such a short time ago that foresters were arguing in vain on countless land-use committees that trees offered better prospects than alternating rotations of gorse and sheep.

The credit for that improvement ultimately belongs to the people responsible for both the protection of the natural forest in the days when that was not a popular cause and the creation of the plantation resource now coming to fruition just when we need it most.

The authors of "Tomorrow's Trees" are prominent in that group of people, and the book is an excellent and needed record of their efforts and of knowledge and potential otherwise likely to be lost in this age of computer models and the marketing of "product". It is a book of its gener-

The Taungya forestry system

Taungya. Forest Plantations with agriculture in South-east Asia. Edited: C.F. Jordan, J. Gajasen, H. Watanabe. CAB International. Sustainable Rural Development Series No 1. 1992. 176pp £27.50. ISBN 085198 8016.

This book, the first in a new series, is based on a symposium at the Vth International Congress of Ecology in Japan. The material in the book is in two parts. The first consists of seven papers that describe the taungya system, its origins, the underlying biology and some socio-economic aspects. Part two covers seven examples from various parts of South-east Asia. The Editors have included an introduction and a conclusion to draw the book together into a coherent whole. In this they have been only partially successful for the individual chapters differ in their treatment depth.

In the introduction the writers argued that taungya was essentially different from agroforestry in that it was aimed at establishing plantations. The crops tended during the first few years were incidental. They argued that agroforestry was much more focused on the production of crops. This argument, I would suggest, is academic as it is more important to focus on how trees and agriculture are interwoven – the difference is only one of degree. I would agree with J. Gajasen and C.F. Jordan when, in Chapter 7, they state that "taungya" is a type of agroforestry albeit organised to assist forest regeneration.

The overview papers in the first section had several interesting chapters. The historical and socio-economic discussion was interesting in that it stressed how taungya was evolving to meet current needs and to overcome some of its negative aspects. The three chapters on the underlying biology considered the general principles of plant competition, nutrient cycling and soil sustainability. My major impression after reading was that there was little hard scientific data on which to base the practice. For example C.F. Jordan states in chapter 5: "We do not know of any studies on nutrient dynamics during the initial stages of taungya." And in chapter 6 L.A. Bruijnzeel states: "No single study has managed adequately

ation, which some may consider a fault, but the opportunities it describes have not changed, only some of the paths to them.

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to quantify all gains and losses of nutrients for a complete cycle of tropical forest cleaning, followed by plantation establishment, maturing and harvesting". This review of Bruijnzeel points to the need for fertiliser, at least for some tropical soils, for them to be sustainable over several rotations.

The final chapter of the first part of the book looked at the theoretical basis for taungya and its improvement. It was again light on hard data, but it was good to see the authors (J. Gajasen and C.F. Jordan) argue for alternative practices on the basis of a better understanding of the system.

The second part of the book looked at taungya in different countries. This part of the book would be a useful introduction to people interested in the application of the system or those wishing to obtain an overview before working in one of the countries. Many variations are discussed and their advantages and limitations are usually spelt out.

Who should purchase this book? It is obviously useful for libraries and those who specialise or work in tropical forestry and agroforestry. It is less useful to forest and other land managers in New Zealand or other developed temperate countries.

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'Managing the World's Forests'

Managing the World's Forests. Looking for Balance Between Conservation and Development (1992). Edited by Narendra P. Sharma. Kendall/Hunt Publishing Co., Iowa, 605pp.

It takes some considerable reading of this tome to discover that, in the main, it is not about the world's forests or seeking a balance between conservation and development, but principally about the state of forests in the developing world and about forestry projects in those countries. Perhaps this is not surprising as the International Bank for Reconstruction and