

1. Record Nr.	UNINA9910520079003321
Autore	Nair P. K. R.
Titolo	An Introduction to Agroforestry : Four Decades of Scientific Developments // by P. K. Ramachandran Nair, B. Mohan Kumar, Vimala D. Nair
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-75358-1
Edizione	[2nd ed. 2021.]
Descrizione fisica	1 online resource (670 pages)
Disciplina	634.99
Soggetti	Agriculture Ecology Forests and forestry Forestry Agrosilvicoltura Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1. INTRODUCTION -- Chapter 1. Historical Developments: The Coming of Age of Agroforestry -- Chapter 2. Definition and Concepts of Agroforestry -- Chapter 3. Classification of Agroforestry Systems -- Chapter 4. Global Distribution of Agroforestry Systems -- Part 2. AGROFORESTRY SYSTEMS AND PRACTICES -- Chapter 5. Shifting Cultivation and Taungya -- Chapter 6. Tropical Alley Cropping and Improved Fallows -- Chapter 7. Tropical Homegardens -- Chapter 8. Shaded Perennial Agroforestry Systems -- Chapter 9. Silvopastoral Systems in the Tropics and Subtropics -- Chapter 10. Agroforestry in the Temperate Zone -- Chapter 11. Other Agroforestry Systems and Practices -- Part 3. BIOPHYSICAL FOUNDATIONS OF AGROFORESTRY: PLANT PRODUCTIVITY -- Chapter 12. General Principles of Plant Productivity -- Chapter 13. Multipurpose Trees (MPTs) and Other Agroforestry Species -- Chapter 14. Plant-to-Plant (Tree-Crop) Interactions in Agroforestry Systems -- Part 4. BIOPHYSICAL FOUNDATIONS OF AGROFORESTRY: SOIL PRODUCTIVITY AND

PROTECTION -- Chapter 15. Soils and Agroforestry: General Principles -- Chapter 16. Soil Organic Matter and Nutrient Cycling -- Chapter 17. Biological Nitrogen Fixation and Nitrogen-Fixing Trees -- Chapter 18. Soil Conservation and Control of Land Degradation -- Part 5. ECOSYSTEM SERVICES OF AGROFORESTRY -- Chapter 19. Ecosystem Services of Agroforestry: An Introduction -- Chapter 20. Carbon Sequestration and Climate Change Mitigation -- Chapter 21. Agroforestry for Biodiversity Conservation -- Chapter 22. Other Ecosystem Services of Agroforestry -- Part 6. SUSTAINABLE DEVELOPMENT, AGROFORESTRY, AND LAND MANAGEMENT IN THE FUTURE -- Chapter 23. Sustainable Development Goals, Food security, and Agroforestry -- Chapter 24. Agroforestry and Land Management in the Future.

Sommario/riassunto

Agroforestry – the practice of growing trees and crops in interacting combinations – is recognized the world over as an integrated approach to sustainable land-use. Agroforestry systems, being multifunctional, facilitate not only the production of food and wood products but also provide a variety of ecosystem services such as climate-change mitigation, biodiversity conservation, and soil quality improvement. Agroforestry research has made rapid strides since organized efforts started in the late 1970s. Today, a vast body of scientific knowledge and an impressive array of publications on agroforestry are available. Four World Congresses on Agroforestry conducted once every five years since 2004 have brought together the global community of agroforestry professionals and practitioners to share and discuss the emerging trends and paradigm shifts in this field. The fifth Congress is scheduled to be held in Québec, Canada. However, a comprehensive college-level textbook incorporating these research findings did not exist until this book was first published. The first edition of this book in 1993 (Nair, P. K. R., 1993) is out of print and somewhat dated. This revised edition, with emphasis on the scientific developments during the past more than four decades, addresses this long-felt need. .
