

1. Record Nr.	UNINA9911011646403321
Autore	Panda Subhabrata
Titolo	Agroforestry : Nature Based Solution for Climate Change and Food Security // by Subhabrata Panda
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9668-55-7
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (341 pages)
Disciplina	634.9 577.3
Soggetti	Forests and forestry Bioclimatology Agriculture Ecology Forestry Climate Change Ecology Environmental Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	-- Chapter 1: Introductory remarks: Agroforestry – the sustainable food source -- Chapter 2: Agroforestry – the treasure of multipurpose foods -- Chapter 3: Agroforestry – influencing production of cereals, pulses, legumes and fruits -- Chapter 4: Agroforestry – helping soil organic carbon built-up -- Chapter 5: Agroforestry – improving soil health and healthy food production -- Chapter 6: Agroforestry – mitigating climate change through carbon sequestration -- Chapter 7: Agroforestry for sustainable and improved livelihoods through value addition and animal husbandry -- Chapter 8: Concluding remarks: Agroforestry – nature-based solution for food security.
Sommario/riassunto	This book explores the diverse potential of agroforestry systems in transforming agricultural practices to sustainably produce food, feed, and materials for supporting community livelihoods. Agroforestry stands out for its ability to detoxify contaminants in soil, water, and plants, thereby providing high quality and affordable food and feed. The topics in this book include the cultivation of plant-based food and

feed sources within the spaces between trees, known as alley crops, and the integration of fruit trees, which diversify nutritional sources. Agroforestry not only enhances food security but also bolsters livelihood security by adding value to agroforestry products, from farming plots to the final food products, and through associated animal husbandry and fishery practices. The rapid growth of trees in agroforestry systems offers lucrative opportunities, such as timber production, which alleviates pressure on natural forests and aids in forest conservation and climate change mitigation through carbon sequestration. The book highlights how agroforestry aligns with the United Nations' 17 Sustainable Development Goals (SDGs). The book will be a valuable resource for students, researchers, and professionals in the fields related to soil, water, sustainable agriculture, and natural resource conservation. Additionally, it offers practical insights for farmers and practitioners aiming to sustain food production and promote healthy livelihoods through hands on practice of real farm-based numerical problems and solutions within the context of climate change, with agroforestry as a nature-based solution for improved soil and water conservation on every farm.
