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Nota di contenuto	Contents; Preface; Acknowledgements; 1 The Tropics; 1.1 Definition of the Tropics; 1.2 Climate; 1.2.1 Tropical rainforest climate; 1.2.2 Tropical wet-dry (savanna) climate; 1.2.3 Desert and semi-desert climates; 1.2.4 Monsoon climate; 1.2.5 Mild temperate (mesothermal) climate; 1.3 Vegetation; 1.3.1 Tropical rainforest; 1.3.2 Savanna; 1.3.3 Monsoon forest; 1.3.4 Desert and semi-desert; 1.4 Relief; 1.5 Soils; 1.5.1 Oxisols; 1.5.2 Ultisols; 1.5.3 Alfisols; 1.5.4 Inceptisols; 1.5.5 Entisols; 1.5.6 Vertisols; 1.5.7 Aridisols; 1.5.8 Mollisols; 1.6 Socio-economic Conditions 1.6.1 Low per-capita income 1.6.2 Low level of industrialization 1.6.3 Demographic characteristics 1.6.4 Political instability 1.6.5 Poverty 1.6.6 Diseases 1.7 Agriculture; 1.7.1 Shifting cultivation; 1.7.2 Permanent cultivation of field crops 1.7.3 Plantation agriculture 1.7.4 Livestock production; References; 2 Shifting Cultivation: Definition, Basic Features and Types; 2.1 Definition; 2.2 Characteristics of Shifting Cultivation; 2.3 Why Fields are Shifted; 2.4 Forms of Shifting Cultivation; 2.4.1 Slash-and-burn agriculture in forest and savanna lowlands; 2.4.2 The chitemene system 2.4.3 The Hmong system - a migratory shifting cultivation 2.4.4 Shifting cultivation in the Orinoco floodplain 2.4.5 The slash-mulch system 2.4.6 The plough-in-slash system; References; 3 Soil Dynamics during

Cultivation; 3.1 Effects of Vegetation Clearing; 3.1.1 Effects on microclimate; 3.1.2 Effects on the soil; 3.1.3 Nutrient and organic matter cycles; 3.1.4 Forest nutrient cycle; 3.1.5 Savanna nutrient cycle; 3.1.6 Nutrient cycling in shifting cultivation agroecosystems; 3.2 Vegetation Slash Burning; 3.2.1 Why vegetation slash is burned; 3.2.2 Effects on the soil
3.3 Organic Matter Decline3.4 Nutrient Decline during Cropping; 3.5 Decline in Soil Physical Status; 3.6 Erosion; 3.7 Shifting Cultivation in River Floodplains; References; 4 Soil Dynamics during the Fallow Period; 4.1 Soil Organic Matter Dynamics; 4.1.1 Organic matter equilibrium concept; 4.1.2 Organic matter equilibrium concept: an explanatory model; 4.1.3 Organic matter accretion in fallow soil in different ecological zones; 4.2 Nutrient Dynamics; 4.2.1 Forest fallows; 4.2.2 Savanna fallows; 4.3 Improvement in Soil Physical Status
4.4 Soil Organic Matter and Nutrient Dynamics in High-altitude Fallows4.5 Soil Erosion; References; 5 Fallow Vegetation Dynamics; 5.1 Fallow Vegetation as a Resource; 5.1.1 Intangible benefits; 5.1.2 Tangible benefits; 5.2 Rainforest Succession; 5.2.1 General features of rainforest secondary succession; 5.2.2 Characteristics of secondary or successional tree species; 5.2.3 Changes in floristic composition of vegetation; 5.2.4 Changes in number of species and species diversity; 5.2.5 Changes in vegetation structure; 5.3 Succession in Deciduous Seasonal (Monsoon) Forest
5.4 Succession in Savanna Ecosystems

Sommario/riassunto

Shifting cultivation is the predominant system of arable farming in the humid and sub-humid tropics, where several hundred million people depend on this system of agriculture for their livelihood. This book documents and systematizes findings in shifting cultivation from over the last six decades, including characterizing secondary succession and relating the changes that fallow vegetation undergoes to the process of soil fertility restoration. This book is essential reading for researchers and students of tropical agriculture and related areas.
