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Nota di contenuto	CONTENTS; Editors; List of Contributors; Soils and Food Security: Challenges and Opportunities; Abstract; 1 The Role of Soils in Food Security; 2 Key Soil Constraints to Crop and Fodder Production; 3 Contributions to Recent Increases in Crop Production; 4 Opportunities for Sustainable Increases of Yield; 5 Concluding Remarks; References; Global Soils: Preserving the Capacity for Food Production; Abstract; 1 Introduction; 2 Global Distribution of Soil Resources versus Food Production; 3 Towards Global Governance of Soil Resources; 4 Towards Zero Net Soil Degradation; 5 Conclusions; References Soil Natural Capital and Ecosystem Service Delivery in a World of Global Soil Change Abstract; 1 Overview of Soil Ecosystem Services; 2 Drivers of Global Soil Change; 3 National Soil Change, the Countryside Survey of Great Britain; 4 Approaches to Ecosystem Service Valuation; Acknowledgements; References; The Evaluation and Reporting of Soils in Sustainable Agriculture and Food Systems; Abstract; 1 Introduction; 2 Measurement Tools; 3 Sustainability Schemes in the USA; 4 Global Sustainability Schemes; 5 Discussion and Conclusions; References Agrobiodiversity and Potential Use for Enhancing Soil Health in Tropical Soils of Africa Abstract; 1 Introduction; 2 Description of Soils in Sub-Saharan Africa; 3 Land Degradation in Cropping Systems; 4 Soil Biology: Role of Soil Biodiversity and Functions (Ecosystem Services); 5 Case Studies: Effect of Management and/or Land Use Intensification; 6 Mitigation of Soil Degradation through Integrated SoilFertility

Management (ISFM) Approaches: Sustainable Soil management Practices/Systems; 7 Biodiversity of Tropical Soils: Socioeconomic, Institutional and Policy Issues; 8 Synthesis; References  
Organic Matter Availability and Management in the Context of Integrated Soil Fertility Management in sub-Saharan Africa Abstract; 1 Introduction; 2 Organic Matter in Relation to Paradigm Shifts in Tropical Soil Fertility Management; 3 Availability and Quality of Organic Resources in African Farming Systems; 4 Organic Matter Production and Use in the Context of ISFM; 5 Soil Organic Matter Status and Quality as Affected by ISFM; 6 Conclusions; Acknowledgments; References;  
Climate Change and Forest Dynamics: A Soils Perspective; Abstract; 1 Introduction; 2 Projected Trends in Climate Change  
3 Changes in Forest Dynamics 4 Food Security Implications of Forest and Soil Responses to Global Change; 5 Soil Characteristics as Tools for Adaptive Management; References; Plant Nutrients; Abstract; 1 Introduction; 2 Availability of P and K Fertilisers: Supply, Demand and Price; 3 Nutrient Audits and Fertiliser Use Statistics - Evidence of Need; 4 Projections of Need to Support a Growing World Population; 5 Mineral Dissolution Rates in the Soil System; 6 Possible Alternatives to Conventional Fertiliser Products; 7 Conclusions; References  
Soil Physical Degradation: Threats and Opportunities to Food Security

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Sommario/riassunto

Soil is essential to agriculture and a resource that cannot be replaced easily. Nevertheless, its importance to food production and the threats to its sustainability are often overlooked. This book, the 35th volume of Issues in Environmental Science and Technology, examines the current status of soils across the globe and their potential for food production to meet the needs of the World's population in the 21st Century. Threats, such as the degradation, pollution and erosion of soil are discussed, along with the possible consequences of climate change for soil and food production. As an ecosystem

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