1. Record Nr. UNINA9910254107003321 Autore Hertel Thomas W Titolo Global Change and the Challenges of Sustainably Feeding a Growing Planet / / by Thomas W. Hertel, Uris Lantz C. Baldos Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 **ISBN** 3-319-22662-2 Edizione [1st ed. 2016.] 1 online resource (XXI, 184 p. 49 illus., 46 illus. in color.) Descrizione fisica 363.705 Disciplina Soggetti **Environmental management** Agricultural economics **Environmental monitoring Environmental Management** Agricultural Economics Monitoring/Environmental Analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Foreword -- Preface -- 1) Overview of global land use, food security Nota di contenuto and the environment -- 2) Population and income as drivers of global land use -- 3) Productivity growth and yield response in the crop sector -- 4) Potential for cropland area response -- 5) Biofuels and its impact on global land use -- 6) Climate change, land use and the environment -- 7) Competing demands for land in the 21st century -- 8) The global livestock industry as a driver of land use -- 9) Food security -- 10): Looking back to go forward: Global land use in 2050 -- References --Glossary -- Appendix -- Index. Sommario/riassunto This book explores the fundamental determinants of sustainability as seen through the lens of long term changes in agricultural land use and the associated implications for environmental and food security. Each chapter builds part of the global sustainability story by focusing on one driver, or underlying determinant, of land use change at global scale. It starts with key factors which have been influential in the past, such as

growth in population, incomes and agricultural productivity, thereafter turning to new drivers such as biofuels, climate change and demand for

environmental services. Specialized topics include food security outcomes, projections of future agricultural prices, greenhouse gas emissions, the role of globalization and market integration. The final chapter integrates all of these elements into a comprehensive analysis of food and environmental security in 2050. The book draws heavily on the emerging body of literature on these topics, summarizes key findings and organizes these within a unifying economic framework.