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Nota di contenuto	Chapter 1. Introduction: The Vulnerability and Transformation of Indonesian Peatlands Part I. Vulnerability of Peat Swamp Forest Chapter 2. Peatland Degradation, Timber Plantations, and Land Titles in SumatraChapter Chapter 3. Characteristics of Bird Community Response to Land Use Change in Tropical Peatland in Riau, Indonesia Chapter 4. Impact of Industrial Tree Plantation on Ground-dwelling Mammals and Birds in a Peat Swamp Forest in Sumatra Chapter 5. Patterns of CO2 Emission from a Drained Peatland in Kampar Peninsula, Riau Province, Indonesia Part II. Resilience and Adaptability of Peat Swamp Forest Chapter 6. Termite – Friend or Foe? Conservation Values of Termites in Tropical Peat Systems Chapter 7. The Timber Processing and Retail Sectors in Pekanbaru, Riau: Toward Reforestation by Local People Chapter 8. Toward Climate Change Mitigation: Restoration of the Indonesian Peat Swamp Part III. Transformation Chapter 9. Water Management for Integrated Peatland Restoration in Pulau Tebing Tinggi PHU, Riau Chapter 10. Genetic Diversity in Peatland Restoration: A Case of Jelutung Chapter 11. Interests Arrangement in the Implementation of Indonesian Sustainable Palm Oil Certification: Case Study of Sari Makmur Palm Oil Smallholders in Riau Province.
Sommario/riassunto	This open access book deals with restoring degraded peatlands to help mitigate global warming, to which SDG 15 and SDG 13 are directly

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related. The book analyzes peatland degradation and restoration of the Indonesian peatland ecosystem through the integrated lens of resilience, vulnerability, adaptation, and transformation. It sheds light on what constitutes "resilience" of the peat swamp forest, digs deeper into local knowledge in developing the studies on institutions, governance, and ecological conditions that support the resilience of the peat swamp forest to elaborate on the idea of transformation in today's degraded peatlands. While peat swamp forests may be resilient, they remain highly vulnerable. The book analyzes restoration efforts through rewetting, revegetation, and rehabilitation of the local livelihoods with the concepts of adaptation and transformation. The integrated analysis covers fieldwork of more than a decade and various aspects such as agrarian and social changes, biological changes (birds, mammals, and termites), carbon emission, water control, timber use, revegetation efforts, and the Indonesia Sustainable Palm Oil (ISPO) program implementation. It also employs the ideas of vulnerability, resilience, adaptability, and transformation based on expanded studies on peatlands and observations of and participation in multiple efforts to prevent fires and restore the degraded peatland by researchers, the government, non-government organizations (NGOs), private companies, and last but not least, the local people. The discussion includes the period of pre-degradation and several efforts at peatland restoration for a better understanding and analysis of the long-term peatland dynamics.