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Autore	Von Maltitz Graham
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Altri autori (Persone)	MidgleyGuy VeitchJennifer BrümmerChristian RötterReimund P ViehbergFinn VesteMaik <1963->
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Nota di contenuto	Part I. Background -- Chapter 1. Coupled Earth System and Human Processes - An Introduction to the Book and SPACES and the Book -- Chapter 2. Unique Southern African Terrestrial and Oceanic Biomes and Their Relation to Steep Environmental Gradients -- Chapter 3.

Environmental Challenges to Meeting Sustainable Development Goals in Southern Africa -- Chapter 4. Overview of the Macro-Economic Drivers of the Region -- Part II. Drivers of Climatic Variability and Change in Southern Africa -- Chapter 5. Past Climate Variability in the Past Millennium -- Chapter 6. Southern Africa Climate over the Recent Decades: Description, Variability, and Trends -- Chapter 7. Projections of Future Climate Change in Southern Africa and the Potential for Regional Tipping Points -- Chapter 8. The Agulhas Current System as an Important Driver for Oceanic and Terrestrial Climate -- Chapter 9. Physical Drivers of Southwest African Coastal Upwelling and Its Response to Climate Variability and Change -- Chapter 10. Regional Land-Atmosphere Interactions in Southern Africa: Potential Impact and Sensitivity of Forest and Plantation Change -- Part III. Science in Support of Ecosystem Management -- Chapter 11. Studies of the Ecology of the Benguela Current Upwelling System – the TRAFFIC Approach -- Chapter 12. The Application of Palaeoenvironmental Research in Supporting Land Management Approaches and Conservation in South Africa -- Chapter 13. Soil Erosion Research and Soil Conservation Policy in South Africa -- Chapter 14. Biome Change in Southern Africa -- Chapter 15. Biodiversity and Ecosystem Functions in Southern African Savanna Rangelands: Threats, Impacts and Solutions -- Chapter 16. Managing Southern African Rangeland Systems in the Face of Drought – A Synthesis of Observation, Experimentation, and Modeling for Policy and Decision Support -- Chapter 17. A Fine Line Between Carbon Source and Sink – Potential CO₂ Sequestration Through Sustainable Grazing Management in the Nama-Karoo -- Chapter 18. Trends and Barriers to Wildlife-Based Options for Sustainable Management of Savanna Resources – The Namibian Case -- Chapter 19. Feed Gaps among Cattle Keepers in Semiarid and Arid Southern African Regions: A Case Study in the Limpopo Province, South Africa -- Chapter 20. Agricultural Land-Use Systems and Management Challenges -- Chapter 21. The Need for Sustainable Agricultural Land-Use Systems: Benefits from Integrated Agroforestry Systems -- Chapter 22. Management Options for Macadamia Orchards with Special Focus on Water Management and Ecosystem Services -- Chapter 23. Potential of Improved Technologies to Enhance Land Management Practices of Small-Scale Farmers in Limpopo Province, South Africa -- Part IV. Monitoring and Modelling Tools -- Chapter 24. A New Era of Earth Observation for the Environment – Spatio-Temporal Monitoring Capabilities for Land Degradation -- Chapter 25. The Marine Carbon Footprint: Challenges in the Quantification of CO₂ Uptake by the Biological Carbon Pump in the Benguela Upwelling System -- Chapter 26. Dynamics and Drivers of Net Primary Production (NPP) in Southern Africa Based on Estimates from Earth Observation and Process-Based Dynamic Vegetation Modelling -- Chapter 27. Comparison of Different Normalisers for Identifying Metal Enrichment of Sediment – A Case Study from Richards Bay Harbour, South Africa -- Chapter 28. Catchment and Depositional Studies for the Reconstruction of Past Environmental Change in Southern Africa -- Chapter 29. Observational Support for Regional Policy Implementation – Land Surface Change under Anthropogenic and Climate Pressure in Saldi Study Sites -- Part V. Synthesis and Outlook -- Chapter 30. Research Infrastructures as Anchor Points for Long-Term Environmental Observation -- Chapter 31. Lessons Learned from a North-South Science Partnership for Sustainable Development -- Chapter 32. Synthesis and Outlook on Future Research and Scientific Education in Southern Africa.

program Science Partnerships for the Adaptation to Complex Earth System Processes (SPACES II, 2018-2022). It addresses the scientific, social, and economic issues related to climate change, its potential impacts on the various ecosystems, adaptations, and management interventions for enhancing systems resilience in Southern Africa. It is written by numerous scientists from African states and Germany and summarizes the latest research findings, which are of great relevance for a better understanding of climate change impacts, adaptations, and vulnerabilities as well as for developing management options and policy options to reduce the associated risks. This is crucial considering that the projected African population increase is exceptional. Furthermore, climate change is assumed to hit southern Africa extremely hard with a significant increase in extreme events and the frequency of severe droughts, heat waves, and flooding. Southern Africa hosts a high variety of ecosystems, which belongs to important biodiversity hotspots for unique flora and fauna. The surrounding oceans form, in turn, a bottle neck within the ocean's global thermohaline circulation, act as a still poorly understood carbon sink and source and play an important role for fisheries as they are highly productive. Considering these important aspects, the book is an important interdisciplinary contribution to the scientific literature and will find a wide readership. The book is aimed at students, teachers, and scientists in the fields of terrestrial and marine ecology, environmental, nature and landscape planning, agriculture, environmental and resource management, biodiversity, and nature conservation, as well as scientists and representatives in specialised authorities and associations, nature conservationists, and policy makers of related disciplines.
