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Soggetti	Refuse and refuse disposal Sustainability Environmental sciences - Social aspects Environmental management Energy policy Energy and state Waste Management/Waste Technology Environmental Social Sciences Environmental Management Energy Policy, Economics and Management
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Nota di contenuto	Chapter 1. An Overview of water, energy food and ecosystem interactions within the framework of sustainable development goals -- Chapter 2. Sustainable rural livelihoods and the role of Water, Energy, Food in Sustainable Development -- Chapter 3. Challenges Facing water, energy and food MENA Region -- Chapter 4. Role of Water, Energy and Food Nexus in Sustainable Development: Case Studies -- Chapter 5. Analysis and Assessment of the water-food-energy nexus using Indices in the MENA region for Sustainable Development region -- Chapter 6. Territorial climate planning in water-scarce areas as a subnational integration process: Case of the Souss Massa, Region, Morocco -- Chapter 7. Future Scenarios of the Algerian food system

against natural vulnerabilities and water challenges -- Chapter 8. Adaptation Model for Food security and the problem of Water resources in Algeria -- Chapter 9. Various water-agricultural management practices from the Water-Energy-Food viewpoint: Tomato and melon production case study -- Chapter 10. Standardized hydraulic incidents index (SHYINI): a new method to Analyze hydraulic incidents and their influence on Energy.-Chapter 11. Development of RO desalination system powered by PVT panels for rural areas in the MENA region -- Chapter 12. The Integrated Management of the Natural Resources within the Water-Energy-Food Sectors -- Chapter 13. The Water-Energy-Food Nexus: A focused review of enabling and accelerating factors for nexus implementation in the Mediterranean area -- Chapter 14. ICT tool to facilitate collaborative governance of water resources in the Mediterranean agriculture -- Chapter 15 Sediment Management for the Fertile Crescent and Southwest Asia in times of Global Warming.-Chapter 16 Sediment Management for the Nile River in times of Global Warming -- Chapter 17 Explore past, present, and future scenarios for climate change and natural resources in Saudi Arabia -- Chapter 18 Haloculture: a new approach to achieve food security and reduce climate change consequences for societies -- Chapter 19 Conclusions and Recommendations.

Sommario/riassunto

This book addresses the application of the water, energy and food nexus in the MENA Region. It highlights the technologies and solutions to support the sustainable development of rural areas in the region. The first part provides an introduction and an overview of water, energy food, climate change, and ecosystem interactions within the framework of sustainable development goals. The editors present a brief overview and highlights of the book themes and chapters. The second part discusses current State and Security of the WEF Nexus in the MENA Region, addresses the role of water, energy and food nexus in sustainable development through reviewing case studies in the MENA Region that have followed an integrated nexus approach. The third part focuses on the integration within the Nexus for Rural Development, includes three chapters. It discusses analysis and assessment of the nexus through a quantitative index approach to consider the efficiency and security of resources; addresses territorial climate planning in water-scarce areas, focusing on the Souss Massa Region in Morocco; and discusses the Algerian food system and future scenarios through the lens of food and water challenges. The fourth part addresses the WEF Nexus and sustainable development solutions and technologies; exploration of an adaptation model for food security and water resources, water-agricultural management practices; standardized hydraulic incident index to analyze hydraulic incidents and their impact on energy; integrated management of natural resources in Egypt through the WEF nexus approach; and ICT tools as a facilitator for collaborative governance of water resources in Mediterranean agriculture. The fifth chapter focuses on sediment management in the context of climate change for the Fertile Crescent and Southwest Asia, and the Nile River. It also addresses haloculture as a climate change adaptation and mitigation solution, that supports food security. Finally, the book presents key updates, conclusions and recommendations from the book chapters. The book is useful to researchers, professionals, practitioners, post-graduates and undergraduates who are interested in the field of sustainable development and water, energy and food interaction.