

1. Record Nr.	UNINA9910299371503321
Titolo	The Water-Energy-Food Nexus : Human-Environmental Security in the Asia-Pacific Ring of Fire // edited by Aiko Endo, Tomohiro Oh
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	981-10-7383-X
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (330 pages)
Collana	Global Environmental Studies, , 2192-6336
Disciplina	338.99507
Soggetti	Sustainable development Environmental management Energy security Agriculture Environmental health Natural resources Sustainable Development Water Policy/Water Governance/Water Management Energy Security Water and Health Natural Resources
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I Introduction -- 1 Introduction: Human-Environmental Security in the Asia-Pacific Ring of Fire: Water-energy-food Nexus -- Part II Water-Energy Nexus (Water for Energy Production) .-2 Assessment of Potential Small hydropower Generation: A Case Study in Otsuchi, Iwate Prefecture, Japan -- 3 Hazard-specific Vulnerability Mapping for Water Security in a Shale Gas Context -- 4 Exploring Future Water Demand and Climate Change Impacts on Water Availability in the Peace Region of British Columbia, Canada -- 5 Monitoring Hot Spring Aquifer Using Repeat Hybrid Micro-gravity Measurements in Beppu Geothermal Field, Japan -- 6 Evaluation of the Shallow Geothermal Potential for a Ground-Source Heat Exchanger: A Case Study in Obama Plain, Fukui Prefecture, Japan -- Part III Water-Food Nexus (Water for Coastal

Ecosystem Conservation) -- 7 Lacustrine groundwater discharge in southern Laguna de Bay, Philippines -- 8 Submarine Groundwater Discharge and its Influence on Primary Production in Japanese Coasts: Case Study in Obama Bay -- 9 Relationships Between Submarine Groundwater Discharge and Coastal Fisheries as a Water-Food Nexus -- 10 Tradeoff Between Hot spring Use and River Ecosystem: The Case of Beppu City, Oita Prefecture, Japan -- Part IV Governance and Management of Resource System -- 11 The Water-Energy-Food Nexus and California's Sustainable Groundwater Management Act -- 12 Pump Tax, Basin Equity Assessment and Sustainability in Groundwater Management: Orange County Water District Experience -- 13 Utilization of Environmental Water Resources in the Reconstruction of Otsuchi Town After the 2011 Tsunami -- 14 Experience of Disaster and Recognition of Local Re-Sources: A Survey of a Tsunami-Damaged Town in Japan -- 15 Serious Matters Related to Development of Small-scale Geothermal Power Generation in Beppu-Onsen Hot Spring After 2011 -- Part V Understanding Socio-economic dimension of Resource System -- 16 Social Acceptability of Micro Hydropower in Laguna, Philippines -- 17 Socio-economic Vulnerability and Benefits to the Community Associated with Floating Fish Cages in the Jatiluhur Reservoir -- 18 Accounting for Externalities in the Water Energy Food Nexus -- 19 Making Social Networks Visible: Shared Awareness -- Among Stakeholders on Groundwater Resources -- Part VI Inter- and Trans-Disciplinary for Approaching Nexus Issues -- 20 An Interdisciplinary Approach for Water–Energy–Food Nexus -- 21 Assessment of Collaboration Process in Interdisciplinary Research of Water-energy-food Nexus by Means of Ontology Engineering -- 22 Scenario-based Approach to Local Water-energy-food Nexus Issues with Experts and Stakeholders -- Index.

Sommario/riassunto

This book highlights the water-energy-food nexus as one of the most important and fundamental global environmental issues facing the world. Climate and social changes are putting increased pressure on water, energy and food resources. As water is the central aspect within this cluster, the book focuses on the inherent tradeoffs in water resources between producing/consuming energy and food. In addition, it discusses an inter- and trans-disciplinary approach to understanding the complexity of the water-energy-food nexus system, and creating policy options to reduce the tradeoffs among resources. The content integrates a variety of academic disciplines, including not only the natural sciences (e.g. hydrology, coastal oceanography, coastal aquatic bioscience, fisheries, environmental earth science etc.) but also the humanities and social sciences (e.g. marine policy, environmental energy policy, resource governance, policy process theory etc.). The book can be used as a textbook for undergraduate and graduate-level sustainability science courses. Further, its practical content and trans-disciplinary approach to addressing nexus issues with stakeholders offers vital information for practitioners and administrators alike.
