

Jane Carter Ingram • Fabrice DeClerck
Cristina Rumbaitis del Rio
Editors

Integrating Ecology and Poverty Reduction

Ecological Dimensions

4y Springer

Contents

1 Introduction to Integrating Ecology and Poverty Reduction	1
Fabrice DeClerck, Jane Carter Ingram, and Cristina Rumbaitis del Rio	
2 Introduction to Ecological Dimensions of Hunger	13
Fabrice DeClerck	
3 Ecosystem Services in Agricultural Landscapes	17
Sean M. Smukler, Stacy M. Philpott, Louise E. Jackson, Alexandra-Maria Klein, Fabrice DeClerck, Leigh Winowiecki, and Cheryl A. Palm	
4 Ecology and Human Nutrition	53
Roseline Remans, Jessica Fanzo, Cheryl A. Palm, and Fabrice DeClerck	
5 Landscape Approaches to Achieving Food Production, Natural Resource Conservation, and the Millennium Development Goals	77
Jeffrey C. Milder, Louise E. Buck, Fabrice DeClerck, and Sara J. Scherr	
6 Introduction to Water, Poverty, and Ecology: A Vision for Sustainability	109
Casey Brown	
7 Ecology and Poverty in Watershed Management	113
Timothy O. Randhir and Ashley G. Hawes	
8 Balancing Human and Ecosystem Needs for Water in Urban Water, Supply Planning	127
Thomas FitzHugh, Colin Apse, Ridge Schuyler, and John Sanderson	

9	Water, Ecosystems, and Poverty: Roadmap for the Coming Challenge	151
	Casey Brown	
10	Introduction to Human Health, Ecosystems, and Poverty Reduction	163
	Samuel S. Myers	
11	Land Use Change and Human Health	167
	Samuel S. Myers	
12	The Health Impacts of Climate Change and Ecological Diagnosis and Treatment	187
	Jeremy Hess and Samuel S. Myers	
13	Disease Ecology	217
	Felicia Keesing and Richard S. Ostfeld	
14	Human Health as an Ecosystem Service: A Conceptual Framework	231
	Karen Levy, Gretchen Daily, and Samuel S. Myers	
15	Introduction to Ecological Dimensions of Global Energy Poverty	253
	Cristina Rumbaitis del Rio	
16	Ecological Context for Sustainable Energy Solutions	257
	Susan C. Doll	
17	Ecology-Poverty Considerations for Developing Sustainable Biomass Energy Options	279
	David J. Ganz, David S. Saah, Jill Blockhus, and Craig Leisher	
18	Ecological Sustainability of Woodfuel as an Energy Source in Rural Communities	299
	Rob Bailis, Jeff L. Chatellier, and Adrian Ghilardi	
19	Introduction to the Ecological Dimensions of Climate Change and Disasters	327
	Cristina Rumbaitis del Rio	
20	The Role of Ecosystems in Building Climate Change Resilience and Reducing Greenhouse Gases	331
	Cristina Rumbaitis del Rio	

21 Improving Understanding of Climatic Controls on Ecology in Development Contexts.....	353
Anton Seimon	
22 Incorporating Ecology and Natural Resource Management into Coastal Disaster Risk Reduction.....	369
Jane Carter Ingram and Bijan Khazai	
23 Integrating Natural Resource Management into Disaster Response and Mitigation.....	393
Julie A. March	
Conclusion: Integrating Ecology and Poverty Reduction.....	407
Jane Carter Ingram, Fabrice DeClerck, and Cristina Rumbaitis del Rio	
Index.....	415

Jane Carter Ingram • Fabrice DeClerck
Cristina Rumbaitis del Rio
Editors

Integrating Ecology and Poverty Reduction

The Application of Ecology
in Development Solutions

by Springer



Contents

1 Introduction to Integrating Ecology and Poverty Reduction	1
Fabrice DeClerck, Jane Carter Ingram, and Cristina Rumbaitis del Rio	
2 Introduction: Gender, Education and Ecology	13
Fabrice DeClerck and Jane Carter Ingram	
3 Education, Ecology and Poverty Reduction	17
Robin R. Sears and Angela M. Steward	
4 Why Gender Matters to Ecological Management and Poverty Reduction	39
Isabel Gutierrez-Montes, Mary Emery, and Edith Fernandez-Baca	
5 Introduction: Population, Poverty, and Ecology	61
Alex de Sherbinin	
6 Population Growth, Ecology, and Poverty	65
Jason Bremner, Jason Davis, and David Carr	
7 Alliances, Conflicts, and Mediations: The Role of Population Mobility in the Integration of Ecology into Poverty Reduction	79
Susana B. Adamo and Sara R. Curran	
8 Urbanization, Poverty Reduction, and Ecosystem Integrity	101
Peter Marcotullio, Sandra Baptista, and Alex de Sherbinin	
9 Introduction to Innovative Financing: The Role of Payments for Ecosystem Services in Poverty Reduction	125
Jane Carter Ingram	
10 An Overview of Payments for Ecosystem Services	129
Michael Jenkins	

11	The Potential of Carbon Offsetting Projects in the Forestry Sector for Poverty Reduction in Developing Countries	137
	Manuel Estrada and Esteve Corbera	
12	The Development of Payments for Ecosystem Services as a Community-Based Conservation Strategy in East Africa	149
	Hassan Sachedina and Fred Nelson	
13	Poverty, Payments, and Ecosystem Services in the Eastern Arc Mountains of Tanzania	173
	Brendan Fisher	
14	Payment for Ecosystem Services for Energy, Biodiversity Conservation, and Poverty Reduction in Costa Rica	191
	Natalia Estrada Carmona and Fabrice DeClerck	
15	Introduction: Ecosystem Governance for Conservation and Poverty Reduction	211
	Jane Carter Ingram and Caleb McClennen	
16	Sustainable Fisheries Production: Management Challenges and Implications for Coastal Poverty	215
	Caleb McClennen	
17	Participatory Zoning to Balance Conservation and Development in Protected Areas	235
	Lisa Naughton-Treves	
18	The Role of Protected Areas for Conserving Biodiversity and Reducing Poverty	253
	Margaret Buck Holland	
19	Looking Forward: The Future and Evolving Role of Ecology in Society	273
	Shahid Naeem	
20	Conclusion: Integrating Ecology and Poverty Reduction	303
	Jane Carter Ingram, Fabrice DeClerck, and Cristina Rumbaitis del Rio	
	Index	311