

Contents

Part I Impacts of Change Impacts in Regions and Geographical Areas

1 Regional Vulnerability of Agro-Environmental Processes Facing Climate Change. Latin American Adaptation Agendas.	3
Pablo Torres-Lima and Rey Acosta-Barradas	
2 Risk Analysis in Transboundary Water of the Rivers Pilcomayo and Paraguay.	19
Julian Báez, Roger Monte Domecq and Lisa Lugo	
3 Analysis of Temporal Variability of Droughts in Southern Paraguay and Northern Argentina (1961–2011)	31
Maria Manuela Portela, Artur Tiago Silva, João Filipe dos Santos, Julián Baez Benitez, Carlos Frank and José Miguel Reichert	
4 Sedimentation and Life Expectancy of Lake Amatitlán, Guatemala: Increased Vulnerability Under Future Climate Change	47
Astrid Michels, Michael Lloyd, Roger Woeller, Jean-Francois Dionne, Lorena Grande, Mario Sorto, Ana-Beatriz Suarez and Manuel Basterrechea	
5 Towards Valuing Climate Change Impacts on the Ecosystem Services of a Uruguayan Coastal Lagoon	61
Andrew L. Fanning	
6 Integrating Climate Science, Monitoring, and Management in the Rio de la Plata Estuarine Front (Uruguay)	79
Gustavo J. Nagy, Nathalie Muñoz, José E. Verocai, Mario Bidegain, Bernardo de los Santos, Leonardo Seijo, Juan Martín García, Gabriella Feola, Beatriz Brena and Jimena Risso	

Part II The Management of Climate Change Impacts

- 7 Managing the Impacts of Climate Change in Latin America:
The Need for Technology Transfer 95**
Walter Leal Filho and Franziska Mannke

- 8 Strategic Contributions to Extreme Climate Change:
The Innovation Helixes as a Link Among the Short,
Medium and Long-Terms 107**
Nelson Amaro, Cyrano Ruiz, Juan Luis Fuentes, Julio
Miranda and Ericka Tuquer

- 9 What Contributes to Climate Change Adaptive Capacity?
A Retrospective Case Study in a Caribbean Small Island
Community 123**
Jessica Jaja and Jackie Dawson

- 10 Taking a Micro-Perspective on the Global Challenge of
Climate Change: The “Microenergy Systems” Research
Focus at the Technische Universität Berlin 135**
Jonas Van der Straeten, Kathrin Friederici and Sebastian Groh

- 11 The Impacts of Climate Change on the Livelihoods of Coastal
People in Bangladesh: A Sociological Study 151**
Joydeb Garai

- 12 From Rainforests to Drylands: Comparing Family Farmers’
Perceptions of Climate Change in Three Brazilian Biomes 165**
Gabriela Litre, Stéphanie Nasuti, Catherine A. Gucciardi
Garcez, Diego Pereira Lindoso, Flávio Eiró, Jane Simoni,
Carolina Joana da Silva and Cristiane Lima Façanha

Part III The Role of Policy-making and the Contribution of Information, Communication and Stakeholders’ Involvement

- 13 Precipitation Variability and Adaptation Strategies in the
Southern Yucatán Peninsula, Mexico: Integrating Local
Knowledge with Quantitative Analysis 189**
Sofía Márdero, Birgit Schmook, Zachary Christman, Elsa
Nickl, Laura Schneider, John Rogan and Deborah Lawrence

- 14 Making Science Count: Climate Change and the
Science/Practice Interface 203**
Harry Diaz and Margot Hurlbert

15	Island Erosion and Afflicted Population: Crisis and Policies to Handle Climate Change	217
	Tuhin Ghosh, Rituparna Hajra and Anirban Mukhopadhyay	
16	Does Awareness Through Learning About Climate Change Enhance Farmers' Perception of and Adaptation to Climate Uncertainty?	227
	Rosaine Nérice Yegbemey, Gauthier Biaou, Jacob Afouda Yabi and Sènakpon Eric Haroll Kokoye	
17	Local Knowledge and Participatory Climate Change Planning in the Northeastern U.S	239
	Lauren C. Heberle, Sam Merrill, Chris H. Keeley and Sadie Lloyd	
18	Evaluating of Post-2012 Carbon Policies	253
	Olga Diukanova	
19	Perceptions About Climate Change in Sidama, Ethiopia	267
	Seyoum Hameso	
20	Perceptions of and Attitudes Toward Climate Change in the Southeastern United States	287
	David Himmelfarb, John Schelhas, Sarah Hitchner, Cassandra Johnson Gaither, KathErine Dunbar and J. Peter Brosius	
21	The Role of Higher Education in Institutionalising Climate Change in Bangladesh	301
	Gazi Mahabubul Alam and Abul Quasem Al-Amin	

International Perspectives on Climate Change

Latin America and Beyond

Leal Filho, W.; Alves, F.; Caeiro, S.; Azeiteiro, U.M. (Eds.)

2014, IX, 316 p. 69 illus., Hardcover

ISBN: 978-3-319-04488-0