

# Contents

## **Part I Global Change and the Nexus Approach to Management of Environmental Resources**

- 1 The Nexus Approach to Governance of Environmental Resources Considering Global Change . . . . . 3**  
Mathew Kurian and Reza Ardakanian
- 2 The Water-Energy-Food Nexus: Enhancing Adaptive Capacity to Complex Global Challenges. . . . . 15**  
Christopher A. Scott, Mathew Kurian and James L. Wescoat Jr.
- 3 The Nexus Approach to Managing Water, Soil and Waste under Changing Climate and Growing Demands on Natural Resources . . . . . 39**  
Rattan Lal

## **Part II Financing of Infrastructure Projects: Implications for Sustainability and Accountability**

- 4 Intergovernmental Fiscal Relations: Questions of Accountability and Autonomy . . . . . 63**  
Linda Gonçalves Veiga and Mathew Kurian
- 5 Results-Based Financing and Its Potential Role in Advancing the Nexus Approach . . . . . 83**  
Mario Suardi and Mathew Kurian
- 6 Life-Cycle Cost Analysis of Infrastructure Projects . . . . . 105**  
V. Ratna Reddy and Mathew Kurian

### **Part III Strategies for Implementation: Guidance on Resource Reuse and Data Visualization**

<b>7</b>	<b>Applications of Life-Cycle Cost Analysis in Water and Wastewater Projects: Lessons from European Experience . . .</b>	<b>131</b>
	Georg Schiller and Stefan Dirlich	
<b>8</b>	<b>Designing Sustainable Wastewater Reuse Systems: Towards an Agroecology of Wastewater Irrigation. . . . .</b>	<b>153</b>
	Philipp Weckenbrock and Graham Alabaster	
<b>9</b>	<b>Visualization of Water Services in Africa: Data Applications for Nexus Governance. . . . .</b>	<b>189</b>
	Theresa Mannschatz, Manfred F. Buchroithner and Stephan Hülsmann	
<b>10</b>	<b>Policy Is Policy and Science Is Science: Shall the Twain Ever Meet? . . . . .</b>	<b>219</b>
	Mathew Kurian and Reza Ardakanian	

Governing the Nexus

Water, Soil and Waste Resources Considering Global  
Change

Kurian, M.; Ardakanian, R. (Eds.)

2015, XX, 230 p. 39 illus., 28 illus. in color., Hardcover

ISBN: 978-3-319-05746-0