Contents

Part I Introduction

1 Building the Global Adaptation Community ........................................ 3
   Konrad Otto-Zimmermann

Part II Describing Impacts at the Local Level

2 Introduction: Describing Impacts at the Local Level ......................... 13
   Lucinda Fairhurst

3 Understanding Potential Climate Change Impacts
   and Adaptation Options in Indian Megacities .................................. 15
   Diana Reckien, Martin Wildenberg, and Kaushik Deb

4 Assessment of Climate Change-Induced Vulnerability
   to Floods in Hyderabad, India, Using Remote Sensing Data ............. 35
   Oleksandr Kit, Matthias Lüdeke, and Diana Reckien

5 The Role of Community Resilience in Adaptation
   to Climate Change: The Urban Poor in Jakarta, Indonesia ............. 45
   Mario Wilhelm

6 Ecohealth and Climate Change: Adaptation to Flooding Events
   in Riverside Secondary Cities, West Africa ..................................... 55
   Guélagado Cissé, Brama Koné, Hampâté Bâ, Ibrahima Mbaye,
   Kofi Koba, Jürg Utzinger, and Marcel Tanner

7 Climate Change and Adaptive Capacity of Women
   to Water Stress in Urban Centers of Nigeria:
   Emerging Concerns and Reactions .................................................. 69
   Isaac B. Oluwatayo
8 Urban Climate Strategies Against Future Heat Stress Conditions ........................................................................... 79
Lutz Katzschner

9 Climate-Proof Urban Transport Planning: Opportunities and Challenges in Developing Cities ..................................... 91
Urda Eichhorst, Daniel Bongardt, and Montserrat Miramontes

Part III Frameworks for Local Action – Challenges and Proactive Recommendations

10 Introduction: Frameworks for Local Action – Challenges and Proactive Recommendations ........................................... 109
Olivia Tusinski and Alice Balbo

11 Inclusive Adaptation: Linking Participatory Learning and Knowledge Management to Urban Resilience ...................... 111
Michaela Hordijk and Isa Baud

12 Urban Adaptation Planning and Governance: Challenges to Emerging Wisdom .............................................................................. 123
JoAnn Carmin, David Dodman, Linda Harvey, Shuaib Lwasa, and Patricia Romero-Lankao

13 Urban Climate Change Adaptation in the Context of Transformation: Lessons from Vietnam ........................................... 131
Matthias Garschagen and Frauke Kraas

14 Getting Ready for a Changing Climate: Supporting Councillor’s Leadership Role in Adaptation ................................. 141
Joyce Wei Ka Lee

15 Environmental Learning from the Ivory Tower to the Town Square: The Case of Trondheim, Norway ...................... 149
Annemie Wyckmans

16 Plan B:altic: A Social-Ecological Approach to Climate Change Adaptation ................................................................................. 157
Sonja Deppisch, Sanin Hasibović, and Meike Albers

17 Governance Recommendations for Adaptation in European Urban Regions: Results from Five Case Studies and a European Expert Survey ................................................................................. 167
Torsten Grothmann
## Contents

18 Creating Resilient Cities Through Empowered, Deliberative Participation .......................................................... 177
   Janette Hartz-Karp and Hans-Peter Meister

Part IV Local Strategies and Actions in Response to Climate Change

19 Introduction: Local Strategies and Actions in Response to Climate Change .................................................. 189
   Monika Zimmermann and Nathan Brettschneider

20 Comparative Research on the Adaptation Strategies of Ten Urban Climate Plans ........................................ 193
   Luc Vrolijks, Ashley Spatafore, and Anisha S. Mittal

21 Managing Regional Climate Mitigation and Adaptation Co-benefits and Co-costs ........................................ 205
   Matthias Ruth

22 Interdisciplinary and Multi-institutional Approaches to Climate Change Adaptation ..................................... 213
   Virginie Moffet, Matthieu Alibert, and Caroline Larrivée

23 Climate Adaptation Strategies: Evidence from Latin American City-Regions .............................................. 223
   Dirk Heinrichs and Kerstin Krellenberg

24 Adaptation in UK Cities: Heading in the Right Direction? .............. 231
   Magnus Benzie, Alex Harvey, and Karen Miller

25 Finding the Balance: Challenges and Opportunities for Climate Change Adaptation at Different Levels of English Local Government .......................................................... 243
   Nadia Manasfi and Elizabeth Greenhalgh

26 Local Strategies for Climate Change Adaptation: Urban Planning Criteria for Municipalities of the Basque Country, Spain .......................................................... 253
   Marta Olazabal, Efren Feliú, Borja Izaola, David Pon, Maria Pooley, Marimar Alonso-Martin, and Carlos Castillo

27 Climate Change Adaptation in Dutch Municipalities: Risk Perception and Institutional Capacity .............. 265
   Maya M. van den Berg
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Climate Change and City Development: Resilience Strategies in Bonn</td>
<td>Rüdiger Wagner</td>
</tr>
<tr>
<td>30</td>
<td>Integrated Climate Adaptation in Dresden: Insights from Flood Prevention</td>
<td>Christian Korndörfer, Peter Teichmann, and Frank Frenzel</td>
</tr>
<tr>
<td>31</td>
<td>Integrated Climate Protection Program for the City of Chemnitz: Climate Diagnosis, Climate Change Prognosis, and Adaptation Measures in the Urban Area</td>
<td>Petra Schneider, Nicole Gottschalk, Ralf Löser, and Thomas Scharbrodt</td>
</tr>
<tr>
<td>32</td>
<td>Adaptation Strategies for the City of Cape Town: Finding the Balance Within Social-Ecological Complexity</td>
<td>Darryl Colenbrander, Gregg Oelofse, Anton Cartwright, Howard Gold, and Sakhile Tsotsobe</td>
</tr>
<tr>
<td>33</td>
<td>Sharing the Lagos Megacity Experience in the Integrated Management of Sea Level Rise and Flooding</td>
<td>Nicholas Ozor, Oguguah M. Ngozi, and Maximus Ugwuoke</td>
</tr>
<tr>
<td>34</td>
<td>Community-Based Vulnerability Assessment: Semarang, Indonesia</td>
<td>John Taylor</td>
</tr>
<tr>
<td>35</td>
<td>Research News for Climate Compliant Cities: The Case of Ho Chi Minh City, Vietnam</td>
<td>Frank Schwartze, Andreas Gravert, Ronald Eckert, Ulrike Schinkel, and Ralf Kersten</td>
</tr>
<tr>
<td>36</td>
<td>Building Resilience to Climate Change Through Adaptive Land Use Planning in Ho Chi Minh City, Vietnam</td>
<td>Harry Storch, Nigel Downes, Lutz Katzschner, and Nguyen Xuan Thinh</td>
</tr>
<tr>
<td>37</td>
<td>Climate Change Risk Management for a Suburban Local Government: The Case of Kogarah, Australia</td>
<td>Elisa Idris and Hartmut Fünfgeld</td>
</tr>
</tbody>
</table>
### Contents

38 Climate Change as a Survival Strategy: Soft Infrastructure for Urban Resilience and Adaptive Capacity in Australia’s Coastal Zones ................................................................. 379
   Nan Chen and Peter Graham

39 Curitiba, Brazil: A Model for Resilience in Latin America? .......... 389
   Peter Spathelf

Part V Approaches to Climate Change Adaptation in Cities

40 Introduction: Approaches to Climate Change Adaptation in Cities ........................................................................ 399
   Hartmut Fünfgeld

41 Building Resilience to Climate Change in Asian Cities .............. 401
   Sarah Opitz-Stapleton, Laura Seraydarian, Karen MacClune,
   Greg Guibert, Sarah Reed, Fern Uennatornwaranggoon
   and Cristina Rumbaitis del Rio

42 Local Vulnerability Assessment of Climate Change and Its Implications: The Case of Gyeonggi-Do, Korea ................. 411
   Jaekyung Koh

43 Ecosystem-Based Adaptation in the Urban Environment .......... 429
   Gabriel Grimsditch

44 Urban Agriculture and Climate Change Adaptation:
   Ensuring Food Security Through Adaptation .......................... 441
   Marielle Dubbeling and Henk de Zeeuw

45 Cooling the Public Realm: Climate-Resilient Urban Design ....... 451
   Jeffrey Raven

46 The Role of Transport in Mitigation and Adaptation to Climate Change Impacts in Urban Areas .......................... 465
   Giuseppe Inturri and Matteo Ignaccolo

47 Urban Green Spaces: Potentials and Constraints for Urban Adaptation to Climate Change ........................................ 479
   Juliane Mathey, Stefanie Rößler, Iris Lehmann,
   and Anne Bräuer

48 Urban Climate Framework: A System Approach Towards Climate Proof Cities .................................................. 487
   Sonja Döpp, Fransje Hooimeijer, and Nienke Maas
Part VI  Reality Check – Adaptation on the Ground

49  Introduction: Reality Check – Adaptation on the Ground..................  499
Olivia Tusinski

50  Preparing for Climate Change While Advancing Local Sustainability: A Closer Look at Miami-Dade County, Florida, USA .................................................................  503
Natacha Seijas, Susanne M. Torriente, Nichole L. Hefty, and Melissa Stults

51  Quito’s Climate Change Strategy: A Response to Climate Change in the Metropolitan District of Quito, Ecuador ..............................  515
Carolina Zambrano-Barragán, Othon Zevallos, Marcos Villacís, and Diego Enríquez

52  Climate Change Implications for Dhaka City: A Need for Immediate Measures to Reduce Vulnerability.................................  531
Golam Rabbani, A. Atiq Rahman, and Nazria Islam

53  Adaptation in Practise: Durban, South Africa .....................................  543
Andrew Mather, Debra Roberts, and Geoffrey Tooley

Glossary ...........................................................................................................  565

Index...............................................................................................................  569
Resilient Cities
Cities and Adaptation to Climate Change - Proceedings of the Global Forum 2010
Otto-Zimmermann, K. (Ed.)
2011, XLIV, 576 p., Hardcover
ISBN: 978-94-007-0784-9