### Pascaline Gaborit

# Climate Adaptation and Resilience: Challenges and Potential Solutions

Anticipatory Governance, Planning and Dialogue



Bruxelles · Bern · Berlin · New York · Oxford · Wien

This book is based among others on the results and research of the project Climate Resilient Cities www.resilient-cities.com pilar one.

This project is co-funded by the European Union in the framework of the project.

# Co-funded by the European Union



Disclaimer: The views and opinions expressed in this publication are sole responsibility of the authors and do not necessarily reflect the standpoint of the project or of the funders' organizations.

This book's final version was received on the 9th of august 2022.

This publication has been peer reviewed.

No part of this book may be reproduced in any form, by print, photocopy, microfilm or any other means, without prior written permission from the publisher. All rights reserved.

#### © P.I.E. PETER LANG s.a.

Éditions scientifiques internationales Bruxelles, 2022 1 avenue Maurice, B-1050 Bruxelles, Belgium www.peterlang.com; brussels@peterlang.com

ISBN 978-2-87574-643-6 ePDF 978-2-87574-644-3 ePUB 978-2-87574-645-0 DOI 10.3726/b19893 D/2022/5678/36

Bibliographic information published by "Die Deutsche Nationalbibliothek" "Die Deutsche National Bibliothek" lists this publication in the "Deutsche Nationalbibliografie"; detailed bibliographic data is available on the Internet at <a href="http://dnb.de">http://dnb.de</a>>.

## **Table of Content**

Introduction  PASCALINE	Chapter on Climate Adaptation	11
	Part I Governance and Policies	
	mbitions and Challenges of Climate Adaptation in en Cities	49
Pascaline	GABORIT	
G	ustainable Local Economic Development and ender Perspective in the Context of Climate Change daptation	81
Unang M	ULKHAN	
	xploring Alternatives in Dealing with Climate hange and Land Based Conflicts	99
Arief Wic	aksono and Ilya Moeliono	
Part II S	Successful Climate Adaptation Models and Early Warning Systems	
•	rban Climate Resilience and Water: Successful daptive Planning, and Early Warning Systems 1  GABORIT	21

8 Table of Content

Chapter 5 System for Multi-hazard Potential Impact Assessment, Alert, Emergency Response Planning and Tracking (SMART) in Tamil Nadu India
Korlapati Satyagopal, Itesh Dash, Jothiganesh Shanmugasundaram, Ramraj Narasimhan, Subbiah Arjunapermal
Chapter 6 Landslide Vulnerability, Risk and Resilience Management of Cultural Heritage Sites in the Western Slope of Lawu Mountain, Indonesia
Muhamad Iko Kersapati, Muhammad Attorik Falensky, Gina Fitri, Heri Purwanto
Part III Nature Based Solutions and the Circular Economy
Chapter 7 Nature-Based Solutions in Climate Adaptation: A Shift from Specific, Isolated Tools to Large-scale Global Conservation
Pascaline Gaborit and Zoé Thouvenot
Chapter 8 The Circular Economy from the Perspective of Local Climate Adaptation and Mitigation
Pascaline Gaborit
Chapter 9 Indonesian Women in a Circular Economy: Waste Management Programs
Bulan Prabawani, Wiwandari Handayani, Dessy Ariyanti, Diana Nur Afifah

Table of Content 9

# Part IV Funding Climate Adaptation

Chapter 10	Sustainable Finance: The Hindered Potential of ESC Investing in Funding Climate Mitigation, Climate Adaptation and Resilience		
Zoé Thouvenot			
•	South Asia Region: Expanding Economy with Resilience and Adaptation Financing Challenges  Kumar Pathak	319	
Conclusion			
Chapter 12	Conclusion-Can Local and International Dialogue on Climate Adaptation Echo and Reinforce One Another? A Way Forward	337	
Pascalini	E GABORIT		
Biographies	and Acknowledgments	357	
Contributions and Acknowledgments			