Contents

Part I Urban Planning to Address Inequality in Health and Urban Poverty

Coping with Climate Change Effects on Urban Infrastructure—Problem Structuring Based on Value-Focused Thinking
Methodology ................................................................. 3
Luiz Priori, Marcelo Hazin Alencar and Adiel Teixeira de Almeida

Participatory GIS for Urban Sustainability and Resilience: A Perspective of Social Learning and Ecology of Knowledge .......... 21
Carolina Monteiro de Carvalho and Leandro Luiz Giatti

The Regional Development Councils of Rio Grande do Sul as a Model of Participated Regional Management. Comparative Case Study ...... 35
João Filipe Torres Soares, Leila Dal Moro, Ulisses Miranda Azeiteiro and Luciana Londero Brandli

Participation in Spatial Planning for Sustainable Cities: The Importance of a Learning-by-Doing Approach ............................ 69
Ann Crabbé, Anne Bergmans and Marc Craps

The Urban Planning Guided by Indicators and Best Practices: Three Case Studies in the South of Brazil ........................................ 87
Vanessa T. Rocha, Luciana Londero Brandli, Rosa M. L. Kalil and Cristiane Tiepo

Part II Healthy Cities and Healthy Environments

Karen Munro and David Grierson
Public Policies to Live Well (Buen Vivir) in Harmony with Nature ........................................ 127
Vanessa Hasson de Oliveira

Health and the Urban: Multiple Threads Interconnecting Health in the City ........................................... 141
Marco Akerman, Rosilda Mendes and Francisco de Assis Comarú

Making Rural and Urban Connections by Integrating Nutrition and Agriculture: A Case Study of Food and Nutrition Security Instruments in Brazil ........................................... 155
Veruska Prado Alexandre, Claudia Job Schmitt and Renato Sérgio Jamil Maluf

Health and Sustainability: Reinforcing Public and Private Engagement Through Tertiary Institutions ........................................... 169
Artie W. Ng, Ben Y. F. Fong and Tiffany C. H. Leung

Part III Governance for Sustainable Development

Using the IPBES Conceptual Framework to Study Governance, Institutional Arrangements and Drivers of Biodiversity Loss in Two Indian Cities ........................................... 189
Sandhya Chandrasekharan

Healthy Cities, Healthy Settings and Education: How Do They Work Together to Promote Sustainable Development? ........................................... 207
Maria Cristina Franceschini, Elisabete Agrela de Andrade and Karina Cimmino

Education for Sustainability as a Tool to Promote Sustainable Development: An Experience in the South of Brazil ........................................... 219
Cristiane Tiepo, Luciana Londero Brandli, Rosa M. L. Kalil and Vanessa T. Rocha

Right to the City and Public Policies: Current Perspectives of the Judicialization of Environmental Sanitation Policies in Brazil ........................................... 235
Lorena Sales Araújo and Patrícia Borba Vilar Guimarães

Remote but Connected: Ownership-Inspired Behavior-Driven Development and What an E-Learning Governance System for Africa Could Look like ........................................... 249
Judith Gottschalk and Nicolai Winther-Nielsen
Part IV Social Determinants of Health Oriented to Sustainable Development Goals

How Can the Healthy Municipalities, Cities and Communities Strategy Advance the Sustainable Development Goals Agenda? Lessons from Agenda 21 and the MDGs in Brazil 265
Marcia Faria Westphal, Maria Cristina Franceschini and Andréia Faraoni Freitas Setti

Sustainable Development Goals as a Framework of Education for Healthy Cities and Healthy Environments 283
Marija Jevtic and Catherine Bouland

Healthy People Living on a Healthy Planet—The Role of Education of Consciousness for Integration as an Instrument of Health Promotion 299
Roberto de Almeida and Patricia Garcia da Silva Carvalho

Achieving Sustainability in the City of Winona, Minnesota (USA): A Case Study 327
Bruno Borsari, Neal Mundahl, Anne Morse, Pat Mutter and John W. Howard

Education and Lifelong Learning Sustainability: Windows of Opportunities Found in Brazilian Experiences that Address Agenda 2030 and Advocacy for Health Equity 341
Dais Gonçalves Rocha and Maria Paula Zaitune

Part V Education and Lifelong Learning for Sustainability

Nature-Based Education for Resilient Cities 355
Jean-Pierre Schweitzer and Susanna Gionfra

Co-creation for Sustainability as a Societal Learning Journey 377
Petra Kuenkel and Alina Gruen

Lifelong Education: Citizenship Lessons for Life in More Sustainable Communities? 395
Adriana Gelpi, Rosa Maria Locatelli Kalil and Wagner Mazetto de Oliveira

Live-Long Learning as a Sustainability Strategy 409
Christopher A. Haines

Young People’s Role in Creating Sustainable Cities 423
Chris Willmore, James Longhurst, William Clayton, Hannah Tweddell and Amy Walsh
Climate Change Education for Sustainable Development in Urban Educational Landscapes and Learning Cities. Experiences
Perspectives from Osnabrück ........................................ 439
Gerhard Becker

Institutional Management and Professors’ Perception
in the Strengthening of Education for Sustainability ............ 471
Carolina Sampaio Marques, Nathália Rigui Trindade,
Rodrigo Reis Favarin, Suelen Geise Telocken and Marcelo Trevisan

Part VI Sustainable Cities and Sustainable Buildings
and Sustainable Infrastructure

Promoting Sustainability: The Role of Smart Cities .............. 489
Madhavi Venkatesan

How Technologies Contribute to Urban Sustainability:
The Case of Curitiba—Brazil ........................................ 507
Paola P. Saraiva, Lauro A. Ribeiro, Inara P. Camara and Thaisa L. da Silva

Communication as a Tool for Expanding Social Participation:
The Case of the Rio Operations Center .......................... 521
Alexandre Hojda and Pedro Reis Martins

Sustainable Housing Through Sustainable Planning Practices:
Challenges and Opportunities for Formal Housing Provision
in Nairobi, Kenya .................................................... 539
Collins Sasakah Makunda

Yueqing’s Healthy Future: A Case Study in Design Planning
for Healthy Urbanization ......................................... 551
Linda Powers Tomasso, Cristina Contreras Casado, Judith Rodriguez,
Jie Yin and Julia Kane Africa

Part VII Energy Security, Access and Efficiency

Greening of Greek Islands: Community Wind Approach
at Skyros Island ..................................................... 575
Constantina Skanavis and Aristea Kounani

Prerequisites for Energy Sustainability in Municipalities in Rio
Grande do Sul, Brazil ............................................... 595
Amanda Lange Salvia, Luciana Londero Brandli
and Marcos Antonio Leite Frandoloso

Public Energy Policy in Cabo Verde ................................ 611
Luzia Mendes Oliveira
Lifelong Learning and Education in Healthy and Sustainable Cities
Azeiteiro, U.; AKERMAN, M.; Leal Filho, W.; Setti, A.F.F.; Brandli, L.L. (Eds.)
2018, XVII, 635 p. 97 illus., 22 illus. in color., Hardcover
ISBN: 978-3-319-69473-3