

---

# Contents

## **Part I Political, Social and Economic Dimensions of Sustainable Development**

<b>Lessons Learned for Decision-Makers During a 5-Year Research Period on Sustainability Problems at the Galileo University in Guatemala</b> . . . . .	3
Nelson Amaro	
<b>Using Design Thinking and Facebook to Accompany Women in Solving Water Problems in Morocco</b> . . . . .	25
Diane Pruneau, Boutaina El Jai, Abdellatif Khattabi, Sara Benbrahim and Joanne Langis	
<b>A Critical Review of the Role of Indicators in Implementing the Sustainable Development Goals</b> . . . . .	41
Simon Mair, Aled Jones, Jonathan Ward, Ian Christie, Angela Druckman and Fergus Lyon	
<b>A Minor Matter of Great Concern: The Different Sustainability Logics of ‘Societal Benefits’ and ‘Socio-economic Profit’</b> . . . . .	57
Johan Hultman and Filippa Säwe	
<b>Corporate Sustainable Strategies in Dom Pedro I Industrial Road Axis, São Paulo, Brazil</b> . . . . .	71
João Luiz de Moraes Hoefel, Sônia Regina da Cal Seixas and Micheli Kowalczyk Machado	
<b>Water Resources in the Context of Global Environmental Change: Some Perspectives for Sustainability</b> . . . . .	87
Sônia Regina da Cal Seixas, João Luiz de Moraes Hoefel and Paul Barrett	
<b>Knowledge and Awareness of Sustainability in Saudi Arabian Public Universities.</b> . . . .	103
N. Alghamdi	

<b>Urban Agriculture in Cape Town: Building Sustainable Livelihoods</b> . . . . .	129
D.W. Olivier	
<b>Fostering Sustainable Communities and Resilient Cities Whilst Supporting ‘Life on Land’ Through a Colombian School’s Initiative.</b> . . . .	145
J. Figueroa Vélez, V. Ruiz Vargas, L.M. Hoyos and A. Prowse	
<b>Teaching Food Security to Low-Income Rural Families in the United States.</b> . . . .	161
Taylor Hinton, Kerstin Martin and Eric Pallant	
<b>A Holistic Approach to Embedding Social Responsibility and Sustainability in a University—Fostering Collaboration Between Researchers, Students and Operations.</b> . . . .	177
Liz Cooper and Dave Gorman	
<b>Multi-stakeholder Partnerships (SDG #17) as a Means of Achieving Sustainable Communities and Cities (SDG #11)</b> . . . . .	193
Adriane MacDonald, Amelia Clarke, Lei Huang, Mark Roseland and M. May Seitani	
<b>Pioneering in Sustainability Reporting in Higher Education: Experiences of a Belgian Business Faculty</b> . . . . .	211
K. Ceulemans, T. Stough and W. Lambrechts	
<b>The Challenges of Implementing Sustainable Development Goals in Brazil: An Analysis Based on the Outcomes of the Brazilian Millennium Development Goals</b> . . . . .	233
João Marcelo Pereira Ribeiro, Sthefanie Aguiar da Silva, Vitória Haendchen Fornasari, Larissa Pereira Cipoli Ribeiro, Pedro Sabino Parente and José Baltazar Salgueirinho Osório de Andrade Guerra	
<b>Corporate Policies on Rights and Engagement of Communities: Alternatives and Advances</b> . . . . .	253
Noemi Bonina, Marcelo J. Meiriño and José Abadia Ribeiro	
<b>Local Sustainability Indicators and Their Role in the Implementation of the Sustainable Development Goals in the HE Sector</b> . . . . .	267
Victoria Hands and Richard Anderson	
<b>Putting the ‘Social’ into Sustainability Science</b> . . . . .	285
Carolyn Kagan and Mark H. Burton	

## **Part II Environmental, Social and Technological Dimensions of Sustainable Development**

<b>Implementing the Global Sustainable Goals (SDGs) into Municipal Strategies Applying an Integrated Approach . . . . .</b>	<b>301</b>
Sara Gustafsson and Jenny Ivner	
<b>United Nations Sustainable Development Goals for 2030 and Resource Use . . . . .</b>	<b>317</b>
Ronald Wennersten and Sun Qie	
<b>A Critical Analysis of the Sustainable Development Goals . . . . .</b>	<b>341</b>
Ranjula Bali Swain	
<b>Managing the Growing Kuala Lumpur Mega Urban Region for Livable City: The Sustainable Development Goals as Guiding Frame . . . . .</b>	<b>357</b>
Abdul Samad Hadi, Shaharudin Idrus, Ahmad Fariz Mohamed, Mohd Raihan Taha, Mohamad Raffi Othman, Syed Mohammad Fitri Syed Ismail and Shaharuddin Mohamad Ismail	
<b>Integration of Ecosystem Services as Part of the Nexus Approach into the Applied Teaching of Ecological Engineering . . . . .</b>	<b>369</b>
Petra Schneider and Volker Lüderitz	
<b>Understanding Waste Flow in Malaysian Cities for Sustainable Waste Management. . . . .</b>	<b>389</b>
Ahmad Fariz Mohamed, Muhammad Izzat Rasnan, Norazmin Adibah Othman, Shaharudin Idrus and Mohd Raihan Taha	
<b>Going for Green Cities: The Role of Urban and Peri-Urban Forestry in Creating the Ambiance of the Liveable City in Malaysia . . . . .</b>	<b>401</b>
Shaharuddin Mohamad Ismail, Shaharudin Idrus, Abdul Samad Hadi, Azman A. Rahman, Nurfarahain Zainal, Nur Dina Shazani Mohd Azam and Norashikin Shaharudin	
<b>In Pursuit of Sustainability: Building Science and Community Development . . . . .</b>	<b>419</b>
Monjia Belizaire	
<b>Freedom from Poverty and the Right to Sustainable Development: One Goal but Different Rights and International Commitments . . . . .</b>	<b>431</b>
Katarzyna Cichos	
<b>Sustainable Development and Climate Change . . . . .</b>	<b>445</b>
K.S. Getvoldsen, T.E. Butt, C. House and F. Ferreira	
<b>Lean Production and ISO Standards as Instrument for Achieving 2030 Agenda Goals . . . . .</b>	<b>459</b>
Siarhei Zenchanka and Siarhei Malchenka	

<b>Sustainable Transport Futures: Analysis of the Selected Methodologies Supporting the Planning Process Towards Achieving Goal 11 Sustainable Cities and Communities . . . . .</b>	<b>473</b>
Varvara Nikulina, Henrikke Baumann, David Simon and Frances Sprei	
<b>Green Human Resource Management—Delivering High-Performance Human Resource Systems at Divine Word University Papua New Guinea . . . . .</b>	<b>489</b>
Zainab Olabisi Tairu	
<b>A Case Study on Lifestyles in the Southeast Asian Region from a Sustainable Consumption Point of View . . . . .</b>	<b>513</b>
Midori Aoyagi and Aya Yoshida	
<b>A Systematic Approach to Adopt Sustainability and Efficiency Practices in Energy-Intensive Industries . . . . .</b>	<b>523</b>
Karin Tschiggeerl and Milan Topić	
 <b>Part III Holistic Approaches, Stakeholders Engagement and Education for Sustainable Development</b>	
<b>Environmental Campus Birkenfeld—A Role Model for Universities on How to Contribute to the Implementation Process of the Sustainable Development Goals . . . . .</b>	<b>539</b>
Klaus Helling	
<b>Indigenous and Sustainable Environmental Virtues in St. John Paul II Village in Infanta, Quezon (Philippines) . . . . .</b>	<b>553</b>
Rowel T. San Sebastian	
<b>Local Spatial Planning Processes and Integration of Sustainability Perspective Through a Broad Systems Perspective and Systematic Approach . . . . .</b>	<b>567</b>
Sara Gustafsson and Viktor Andréen	
<b>Designing Green Marketing Across Industries: A Conceptual Framework and Implications for Consumers and Transdisciplinary Research . . . . .</b>	<b>581</b>
Ulla A. Saari, Morgane M.C. Fritz, Saku J. Mäkinen and Rupert J. Baumgartner	
<b>Challenges of Ecosystem Resilience: An Aspect of the Sustainability Science Approach in the Study of Environmental Awareness in the Selayang Municipal Council, Selangor, Malaysia . . . . .</b>	<b>597</b>
Shaharudin Idrus, Noraziah Abdul Aziz, Abdul Samad Hadi, Shaharuddin Mohamad Ismail, Ahmad Fariz Mohamed, Norillyana Roslan, Nor Fairuz Abu Bakar and Farhah Izzati Zubir	

<b>Millennium Development Goals in Nigeria: Improving and Sustaining Growth Rate</b> . . . . .	613
Wilson Friday Ohioze	
<b>Sustainability at German Universities: The University of Hamburg as a Case Study for Sustainability-Oriented Organizational Development</b> . . . . .	629
Claudia T. Schmitt and Sophie Palm	
<b>Scalability in Systemic Design Approach for Rural Development</b> . . . . .	647
Silvia Barbero and Miriam Bicocca	
<b>Participatory Process for Local Development: Sustainability of Water Resources in Rural Communities: Case Manglaralto-Santa Elena, Ecuador</b> . . . . .	663
Herrera F. Gricelda, Carrión M. Paúl and Alvarado M. Niurka	
<b>The Role of Systems Thinking in the Practice of Implementing Sustainable Development Goals</b> . . . . .	677
Martin Reynolds, Christine Blackmore, Ray Ison, Rupesh Shah and Elaine Wedlock	
<b>Creating Circular, Efficient and Symbiotic Cities: And How Higher Education Should Contribute to Create the Solutions that are Required</b> . . . . .	699
Karel Mulder	
<b>Sustainable Diets: The Gulf Between Management Strategies and the Nutritional Demand for Fish</b> . . . . .	711
Andrew Hollingsworth	
<b>A Framework to Conceptualize Sustainable Development Goals for Fishing Gear Resource Management</b> . . . . .	727
Paritosh C. Deshpande and Dina Margrethe Aspen	
<b>Transportation Infrastructure Project Evaluation: Transforming CBA to Include a Life Cycle Perspective</b> . . . . .	745
Heather Luclaire Jones, Filipe Moura and Tiago Domingos	
<b>Flood Vulnerability and the Three Dimensions of Sustainability Philosophy: An Innovative Concept Design for Rapid Assessment</b> . . . . .	773
J. Wakeford, C. House, T.E. Butt, P. Paul and C.D. Beal	
<b>Transition Towards Sustainability in Hull University Business School: A Study of Curricular Sustainability in the Teaching Processes</b> . . . . .	783
M. Ángeles Murga-Menoyo, Fernando Correia and Ángela Espinosa	

<b>From Education for Sustainable Development to Education for Environmental Sustainability: Reconnecting the Disconnected SDGs</b> . . . . .	803
Mohamed Walid and Johannes M. Luetz	
<b>Cooking Courses in Higher Education: A Method to Foster Education for Sustainable Development and Promoting Sustainable Development Goals</b> . . . . .	827
Uwe Neumann	
<b>Promoting Education for Sustainability Through Game-Based Learning: Using the Sustainable Strategies Game to Improve Students' Knowledge and Skills of Sustainable Business Practices</b> . . . . .	849
Kay Emblen-Perry	
<b>A Summer School for Sustainable Management as a Strategy for Fostering Collaborative Competencies to Be Able to Build Multi-Actor Partnerships</b> . . . . .	867
Ingrid Molderez, Karen Brabant and Wim Lambrechts	
<b>Recognising Beach Kindy as a Pedagogical Approach for <i>Critical Agents of Change</i> Within Early Childhood Education</b> . . . . .	877
Diane Boyd and Nicky Hirst	
<b>Perception Versus Skepticism—An Environmental Communication Issue and Climate Change</b> . . . . .	893
C. House, N.L. Jordan, T.E. Butt, J. Kwan and A. Alam	
<b>“Do What I Say, Don’t Do What I Do”: Challenges on Education for Sustainability</b> . . . . .	903
Fernanda Frankenberger, Janaina Macke and Laurelena C. Palhano	
<b>(Inhibiting) Factors for (Un)Sustainable Behaviour in Relation to the Effects of Education for Sustainable Development: The Role of Psychological Constructs, Neurotransmitters and Ideological Impact on Consumer Behaviour</b> . . . . .	915
Kristof Dewaele, Daniel Fischer, Patrick Van Damme and Paul Verhaeghe	
<b>Aligning Sustainable Development Principles and Sectoral Education</b> . . . . .	925
Pinar Gokcin Ozuyar and Tugce Baykent-Beyhan	
<b>Teaching to End Hunger: Critical Analysis of Food Systems and Poverty</b> . . . . .	941
Beth Choate, Eric Pallant and David Shipe	
<b>Rethinking Post-occupancy Evaluation for Sustainable Learning Environments</b> . . . . .	955
Andrea Wheeler, Hina Illahe and Rucha Newalka	

---

<b>The Role of Private–Public Partnerships in the Implementation of Sustainable Development Goals: Experience from the SDG Fund . . . . .</b>	<b>969</b>
Paloma Duran y Lalaguna and Ekaterina Dorodnykh	
<b>The World Sustainable Development Research and Transfer Centre (WSD-RTC) . . . . .</b>	<b>983</b>
Walter Leal Filho	

Handbook of Sustainability Science and Research

Leal Filho, W. (Ed.)

2018, XIII, 991 p. 148 illus., 109 illus. in color.,

Hardcover

ISBN: 978-3-319-63006-9