Contents

Part I  Agriculture and Rural Development at the Heart of Sustainability and Food Security

1  A New Conceptual Framework for Assessing Rural Development Performance: Sustainability of Scale, Scope and Integration ................................................................. 3
   Kiyotada Hayashi

2  A Knowledge Approach to Sustainable Agriculture ........................................ 11
   Jesús Rosales Carreón, René J. Jorna, Niels Faber, and Rob van Haren

3  Sustainable Agriculture Ensures Sustainable Rural Development: A Reality or a Myth.......................................................... 21
   Mirza Barjees Baig and Gary S. Straquadine

4  Policies for Sustainable Agricultural Production and Consumption ...................................................... 33
   Joyce D’Silva

5  Cultivating Faith: The Relationship Between Islam and Sustainable Agriculture in Rural Communities of American Muslims ............................................................. 53
   Eleanor Finnegan

6  Agricultural Development for Food Security and Sustainability in Nigeria ................................................................. 63
   Usman Haruna and Mohammed Bashir Umar

7  African Agriculture at Crossroads: Balancing the Needs of Increased Productivity and the Challenges of Sustainability. The Case of Fadama Agriculture in Semi-Arid North-Central Nigeria ................................................................. 73
   Jake Dan-Azumi
Part II  Governance for Food Security:
Key Challenges and Relevant Debates

8 Food Crisis Mitigation: The Need for an Enhanced
Global Food Governance ............................................................. 93
Mohamed Behnassi and Sanni Yaya

9 18,000 Children Die of Starvation Everyday:
Cannot We Save Them? .............................................................. 127
Md Sirajul Islam Molla

10 The Self-Reliant Country: Sustainable Agricultural
Policy for Australia? ................................................................. 149
Jane Shepherd

11 LCA Potentials and Limits Within a Sustainable
Agri-food Statutory Framework ................................................ 161
Geneviève Parent and Sophie Lavallée

12 Risk Communication at the Hungarian Guar-Gum Scandal ............ 173
Gyula Kasza, Judith Szigeti, Szilárd Podruzsik,
and Krisztián Keszthelyi

13 The Environmental Challenges and Its Security
Implications for South Asia ...................................................... 185
Abhaya Kumar Singh

Part III  Climate Change and Energy as New Major Factors
Redefining the World Food Equation

14 Climate Change, Seasonality and Hunger:
The South Asian Experience ...................................................... 201
Nira Ramachandran

15 Effects of Climate Change on Food and Human Security
in Nigeria .................................................................................. 217
Abiodun Elijah Obayelu

16 Quantitative Assessment of Climate Change by Weather
Generation Models and Downscaling GCM Data
in Tehran, Iran ........................................................................... 233
Majid Habibi Nokhandan, Nafise Haghtalab, Sharare Malboosi,
Fateme Abasi, and Mohsen Goodarzi
17  The Role of Biofuels in the Sustainability of the Environment .......... 245
    Peter Karácsony, Anzelm Kiss, and József Orbán

18  Energy Efficiency, Methane Output, Required
    Carbon Sequestration Area and Water Productivity
    in Extensive and Semi-intensive Beef Production
    in South America – A Comparison of Ecological Currencies .......... 257
    Horst Juergen Schwartz, Cristian Rodolfo Feldkamp,
    and Davi Jose Bungenstab

19  Biogas Energy From Agricultural By-Products:
    Energy Yields and Effects on Organic Farming Systems
    Compared with Energy Maize Cropping ................................ 269
    Arno Deuker, Walter Stinner, and Günter Leithold

Part IV  Sustainable Agriculture and Food Security:
          Relevant Experiences

20  Sustainable Agriculture and Food Crisis in Sub-Sahara
    Africa .................................................................................. 283
    Olubunmi Lawrence Balogun

21  Soaring Food Prices and Africa’s Vulnerability and Responses ...... 299
    Abdul B. Kamara, Albert Mafusire, and Vincent Castel

22  Significance of Vegetable Farming as a Strategy to Enhance
    Household Food Security in Communal Areas of Zimbabwe .......... 331
    Thomas Marambanyika

23  Changes in Agricultural Landscape: Some Ecological
    Implications for Sustainable Agriculture in Indian Punjab .......... 343
    Davinder Kumar Grover

24  Emerging Issues for the Formulation of Policy
    on Agri-Input Delivery System in Nigeria .................................. 357
    Gbolagade Babalola Ayoola and Josephine Bosede Ayoola

Postface ......................................................................................... 371

Notes on Contributors .................................................................. 373

Author Index ................................................................................ 389

Subject Index ................................................................................ 399
Global Food Insecurity
Rethinking Agricultural and Rural Development
Paradigm and Policy
Behnassi, M.; Draggan, S.; Yaya, S. (Eds.)
2011, XXIII, 408 p., Hardcover
ISBN: 978-94-007-0889-1