Contents

Part I  Sustainable Agricultural Development Face to Environmental, Economic and Social Dynamics

1  Agricultural and Food System—Global Change Nexus: Dynamics and Policy Implications ................................................................. 3
    Mohamed Behnassi, Shabbir A. Shahid and R. Gopichandran

2  Challenges Facing the Macroeconomic Policy for Sustainable Development in Agriculture—Based on the Model of Organic Agriculture in Bulgaria ............................................................. 15
    Vania Ivanova and Ekaterina Sotirova

3  Environmentally Sound and Commercially Sustainable Agricultural Development in Nigeria ................................................................. 29
    Usman Haruna and Mohammed Bashir Umar

4  Some Socio-Economic Factors Affecting Farmers’ Participation of Agricultural Extension Education Efforts: A Case Study in Northeastern Thailand ............................................................... 47
    Seksak Chouichom

5  Factors Influencing the Choice of Inorganic contrasting to Organic Practices in Irish Potato Production and Viable Actions to Reverse the Trend: A Case Study of Kisoro District, South-Western Uganda ................................................................. 61
    Joy Samantha Bongyereire

6  Moroccan Agriculture Facing Climate Change: Adaptation and Local Distribution of the Value Added .................................................. 83
    Salma Daoud, Abdelkader Lyagoubi and M. Cherif Harrouni
Contents

7 Economic Impact of Climate Change on Wheat Productivity in Bangladesh: A Ricardian Approach .................. 97
M. A. Monayem Miah, A. K. Enamul Haque and Sahadat Hossain

8 Farmers’ Attitude Toward the Traditional and Modern Irrigation .... 109
Abdullah Awad Al-Zaidi, Mirza B. Baig, Elhag Ahmed Elhag and Mohammed Bin Abdullah Al-Juhani

Part II Impacts of Soil Degradation in Terms of Agricultural Productivity

9 Using Expert System for Sustainable Agriculture and Capacity Building in Degraded Soils................................. 125
Gehan Abdel Hakeem Ibrahim Sallam

10 Managing Degraded Lands for Realizing Sustainable Agriculture Through Environmental Friendly Technologies .......... 141
Mirza B. Baig and Shabir A. Shahid

11 Land Suitability Evaluation for Jatropha (Jatropha Curcas L.) Plantation in Indonesia........................................... 165
Anny Mulyani, Adi Priyono and Fahmuddin Agus

12 Physiological Adaptation of Alfalfa Genotypes to Salt Stress (One of Deleterious Impacts of Climate Change) ................ 181
Masoud Torabi, Ridzwan A. Halim and Rajab Choukan

Part III Livestock Production Enhancement: Recommended Techniques

13 Use of Prosopis juliflora Seedpod as Livestock Feed Supplement in the Arid and Semi-arid Rangelands of Kenya .......... 197
Kipchirchir Koech Oscar, Kinuthia Robinson Ngugi and Wahome Raphael Githaiga

14 Plankton and Common Reed- A Potential Resource for Domestic Animals and Fish in Northern Delta Lakes of Egypt ....... 211
Abd El Aziz Mousa Nour

15 Is the “Livestock Revolution” Achievable in Water Deprived Areas? A Reflection from Experiments with Irrigated Smallholder Farms in Morocco ................................................. 223
Mohamed Taher Sraïri

16 Colostral IgG As Affected By Nutritional Status for Border Leicester Merino Ewes Delivered in Kuwait ......................... 239
Tareq Al-Sabbagh
Part IV  Agro-Biodiversity, Climate Change and Livelihoods: Managing Interdependence

17 Simulation of Carbon Consumption by Biological Models .................. 251
   Olaf Pollmann, Nelli Pollmann, Szilárd Podruzsik and Leon Rensburg

18 Biodiversity Conservation and Carbon Sequestration in Cocoa Agroforest in Southern Cameroon .............................................. 263
   Louisa Zapfack, Jean Kotto-Same, Amougou Akoa and Gaston Achoundong

19 Agroforestry Systems in Morocco: The Case of Olive Tree and Annual Crops Association in Saïs Region .................................... 281
   Khalid Daoui and Zain El Abidine Fatemi

20 Sacred Mangrove Forests: Who Bears the Pride? .............................. 291
   Mwita M. Mangora and Mwanahija S. Shalli

21 Adoption and Utilization of Ethno-postharvest Technologies by Smallholder Farmers in Semi-arid Regions of Zimbabwe: Case of Buhera District ........................................... 307
   Thomas Marambanyika, Timothy Mutekwa and Winmore Kusena

22 The Importance of Non Wood Forest Products for Rural Livelihoods: The Case of South Kordofan State, Sudan ............................. 323
   Taisser H. H. Deafalla, Dafâ-Alla M. Dafâ-Alla and Mustafa M. El Abbas

23 Co-management of Forests and Forest Land Under Decentralization Process in Central Vietnam .................................................... 333
   Tran Nam Tu, Paul Burgers and Annelies Zoomers

Postface ........................................................................................................ 357

Biographies of Contributors .................................................................... 359

Authors Index ............................................................................................ 373

Subject Index ............................................................................................. 375
Science, Policy and Politics of Modern Agricultural System
Global Context to Local Dynamics of Sustainable Agriculture
Behnassi, M.; Shahid, S.A.; Habib-Mintz, N. (Eds.)
2014, XXXI, 380 p. 79 illus., 66 illus. in color., Hardcover
ISBN: 978-94-007-7956-3