Preface

The constantly changing landscape of Agri-Food Supply Chain Management makes it challenging for experts and practitioners to stay informed of the field’s most up-to-date research. That is why Information Science Reference is pleased to offer this single-volume reference collection that will empower students, researchers, and academicians with a strong understanding of critical issues within Agri-Food Supply Chain Management by providing both broad and detailed perspectives on cutting-edge theories and developments. This reference is designed to act as a single reference source on conceptual, methodological, and technical, as well as provide insight into emerging trends and future opportunities within the discipline.

Agri-Food Supply Chain Management: Breakthroughs in Research and Practice is organized into four sections that provide comprehensive coverage of important topics. The sections are:

1. Fundamental Concepts and Design Methodologies;
2. Technologies and Applications;
3. Organizational and Social Implications;
4. Critical Issues and Emerging Trends;

The following paragraphs provide a summary of what to expect from this invaluable reference tool.

Section 1, “Fundamental Concepts and Design Methodologies,” serves as a foundation for this extensive reference tool by addressing crucial theories and presents in-depth coverage of the conceptual design and architecture essential to the understanding of Agri-Food Supply Chain Management. Introducing the book is Global Warming as a Socioscientific Controversy by Craig O. Stewart and Claire Rhodes; a great foundation laying the groundwork for the basic concepts and theories that will be discussed throughout the rest of the book. Through case studies, this section lays excellent groundwork for later sections that will get into present and future applications for Agri-Food Supply Chain Management. The section concludes, and leads into the following portion of the book with a nice segue chapter, Regional Development Disparities in Romanian Agriculture and Rural Development: A Multi-Criteria Approach written by Gabriel Popescu and Simona Bara.

Section 2, “Technologies and Applications,” presents extensive coverage of the various tools and technologies used along with describing how the broad range of Agri-Food Supply Chain Management efforts has been utilized and offers insight on and important lessons for their applications and impact. The first chapter Transcritical Carbon Dioxide Refrigeration as an Alternative to Subcritical Plants: An Experimental Study by Adriana Greco, Ciro Aprea, and Angelo Maiorino, lays a framework for the types
Preface

of works that can be found in this section. This section includes the widest range of topics because it describes tools at place in the modeling, planning, and applications along with case studies, research, methodologies, frameworks, architectures, theory, analysis, and guides for implementation of Agri-Food Supply Chain Management. We conclude the section with *Nanotechnology Applications for Sustainable Crop Production* by Gaurav Mishra, Shailesh Pandey, Antara Dutta, and Krishna Giri a well-rounded transitional chapter into the next section.

Section 3, “Organizational and Social Implications,” includes chapters discussing the organizational and social impact of Agri-Food Supply Chain Management and presents focused coverage of Agri-Food Supply Chain Management in a managerial perspective. The section opens with *Analyzing Farmers’ Learning Process in Sustainable Development: The Case of Organic Paddy Farmers in North Sumatra, Indonesia* by Diana Chalil. This section focuses on how these technologies affect human lives, either through the way they interact with each other, or through how they affect behavioral/workplace situations. Some chapters offer unmistakable value to managers looking to implement new strategies that work at larger bureaucratic levels.

Section 4, “Critical Issues and Emerging Trends,” discusses coverage of academic and research perspectives on Agri-Food Supply Chain Management tools and applications and highlights areas for future research within the field of Agri-Food Supply Chain Management, opening with *Organic Farming: Growth and Issues* by Aditya Vikram Agrawal et al. This section contains chapters that look into theoretical approaches and offer alternatives to crucial questions on the subject of Agri-Food Supply Chain Management and look at what might happen in the coming years that can extend the already staggering amount of applications for Agri-Food Supply Chain Management. The final chapter of the book looks at an emerging field within Agri-Food Supply Chain Management, in the excellent contribution, *Current and Future Trends of Refrigerants Development* by M. V. Duarte, L. C. Pires, P. D. Silva, and P. D. Gaspar.

Although the primary organization of the contents in this work is based on its four sections, offering a progression of coverage of the important concepts, methodologies, technologies, applications, social issues, and emerging trends, the reader can also identify specific contents by utilizing the extensive indexing system listed at the end. As a comprehensive collection of research on the latest findings related to using technology to providing various services, *Agri-Food Supply Chain Management: Breakthroughs in Research and Practice*, provides researchers, administrators and all audiences with a complete understanding of the development of applications and concepts in Agri-Food Supply Chain Management. Given the vast number of issues concerning usage, failure, success, policies, strategies, and applications of Agri-Food Supply Chain Management in countries around the world, *Agri-Food Supply Chain Management: Breakthroughs in Research and Practice* addresses the demand for a resource that encompasses the most pertinent research in technologies being employed to globally bolster the knowledge and applications of Agri-Food Supply Chain Management.