1. Record Nr. UNINA9910983086603321 Autore Pathak Himanshu Titolo Advances in Agri-Food Systems: Volume I / / edited by Himanshu Pathak, W. S. Lakra, A. Gopalakrishnan, K. C. Bansal Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2025 Pubbl/distr/stampa 9789819607594 **ISBN** 9819607590 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (377 pages) Altri autori (Persone) LakraW. S GopalakrishnanA BansalK. C Disciplina 630 Soggetti Agriculture Agricultural biotechnology Agricultural genome mapping Agronomy Agriculture - Economic aspects Agricultural Biotechnology **Agricultural Genetics** Agricultural Economics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 1. Distinguishing Nitrogen and Water Stress in Maize Crop using Nota di contenuto Hyperspectral Data -- 3. Overcoming Challenges in Building and Deploying Al-based Climate-Smart Digital Agriculture – A Comprehensive AI/ML-Enabled Data Quality Framework -- 3. Agroforestry: A Nature-based Solution for Mitigation and Adaptation to Climate Change and Agrobiodiversity Conservation -- 4. Intersecting Climate Change Adaptation and Marine Fisheries Management: Opportunities for Sustainable and Resilient Fisheries -- 5. High Time to Revive Soil Structure and Biome by Harnessing Modern Advance

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## Sommario/riassunto

This edited volume, titled "Advances in Agri-Food Systems" is the first volume that comprises of contributed chapters from 16 leading experts in the fields of agriculture and allied sectors. These chapters are primarily based on invited lectures delivered by experts during the XVI Agricultural Science Congress, held in Kochi, India, from October 10-13, 2023. The book covers all major topics related to advances in agrifood transformation towards sustainability in this era of climate change. These topics include field crops, horticultural crops, the livestock sector, nutritional aspects, the application of the latest fieldbased technologies, and agriculture-related policies and institutions. Some of the key topics covered are: Nitrogen and Water Stress in Maize Crop; Rainwater Harvesting Technologies; Applications of Big Data Analytics, Artificial Intelligence and Digital Agriculture; Nature-based Solutions; Impact of Climate Change on Livestock, Agroforestry, Fisheries; and Resource Efficient and Environment-Friendly Production, among others. This book aims to exchange and share the latest research findings, ideas, and experiences on all aspects of agri-food systems to formulate pathways for transforming our agri-food system to meet the United Nations Sustainable Development Goals (SDGs) by 2030. It provides valuable insights and knowledge to a diverse audience, including scientists, academicians, students, entrepreneurs, farmers, policymakers, and others.