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Nota di contenuto	Preface -- Chapter 1 Agrovoltaic and Smart Irrigation: Pakistan Perspective by Hafiz M. Asfahan, Muhammad Sultan, Fiaz Ahmad, Faizan Majeed, Md Shamim Ahamed, Marjan Aziz, Redmond R. Shamshiri, Uzair Sajjad, Muhammad Usman Khan and Muhammad Farooq -- Chapter 2 Sustainable Irrigation Management for Higher Yield by Fahd Rasul, Hassan Munir, Aftab Wajid, Muhammad Safdar, M. Salman Ayub, Sobia Shahzad, Rehan Mehmood, M. Adnan Shahid, Abid Sarwar, M. Danish Majeed, Umair Gull, Wajid Nasim Jatoi, Muhammad Mubeen, Summera Jahan and Shakeel Ahmed -- Chapter 3 An Overview on Techniques Involved in Recharging Ground Water and Its Impacts by Muthuminal R. and Mohana Priya R. -- Chapter 4 An IoT-based Immersive Approach to Sustainable Farming by Pratik Ghutke and Rahul Agrawal -- Chapter 5 Smart Rainwater Harvesting System for Sustainable Agricultural Irrigation and Drainage System by Mohd Hudzari Haji Razali, Abdul Qudus Puteh, Alawi Haji Sulaiman and Mohamad Hakim Mohamad Yatim -- Chapter 6 Water Sustainability through Drainage Reuse in Agriculture - A Case for Collaborative Wireless Sensor Networks by Huma Zia -- Chapter 7 Improvement of Tertiary Irrigation Networks, Changes in Cropping Patterns, and Increasing Cropping Index at Kendal Indonesia by Meinarti Norma Setiapermas, Anggi Sahru Romdon and Yulis Hindarwati -- Chapter 8

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Sommario/riassunto

Uneven distribution and depletion of good-quality water reserves significantly devastate the agriculture sector. In this scenario, water management as well as efficient irrigation and drainage strategies are primarily required to conserve water resources and enhance farm efficiency. *Irrigation and Drainage - Recent Advances* provides insights into irrigation methods, scheduling possibilities, and optimal irrigation frequencies. It also discusses management strategies including methods of groundwater recharging and rainwater harvesting, restoration, and modification of drainage networks for manifesting the cropping index. The book presents key aspects and examines the role of Agrovoltic energy, artificial intelligence, and the Internet of Things (IoT) in the development of smart irrigation systems for sustainable farming.
