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Sommario/riassunto

The agricultural community is face with the challenge of increasing food production by more than 70% to meet demand from the global population increase by the mid-21st century. Sustainable food production involves the sustained availability of resources, such as water and energy, to agriculture. The key challenges to sustainable food production are population increase, increasing demands for food, climate change, climate variability, and decreasing per capita land and water resources. To discuss more details on (a) the challenges for sustainable food production and (b) mitigation options available, a Special Issue on "Water Management for Sustainable Food Production" was assembled. This Special Issue focused on issues such as irrigation using brackish water, virtual water trade, allocation of water resources, consequences of excess precipitation on crop yields, strategies to increase water productivity, rainwater harvesting, irrigation water management, deficit irrigation, fertilization, environmental and socioeconomic impacts, and irrigation water quality. The articles in the Special Issue cover several water-related issues across the U.S., Asia, Middle East, Africa, and Pakistan concerning sustainable food production. The articles in this Special Issue highlight the substantial impacts on agricultural production, water availability, and water quality

in the face of increasing demands for food and energy.