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Nota di contenuto	Part 1: Advances and Prospects for Understanding Stress Environments -- Chapter 1. Abiotic Stresses in Agriculture: An Overview -- Chapter 2. Atmospheric Stressors: Challenges and Coping Strategies -- Chapter 3. Agriculture Drought Management Options: Scope and Opportunities -- Chapter 4. Edaphic Stresses: Concerns and Opportunities for Their Management -- Part 2: Adaptation and Mitigation Options -- Chapter 5. Managing Soil Related Abiotic Constraints for Sustainable Agriculture -- Chapter 6. Developments in Management of Abiotic Stresses in Dryland Agriculture -- Chapter 7. Heavy Metal Toxicities in Soils and Their Management -- Chapter 8. Current Trends in Salinity and Water logging Tolerance -- Chapter 9. Impacts and Management of Temperature and Water Stress in Crop Plants -- Chapter 10. Plant Bio-regulators: A Mitigation Strategy for Resilient Agriculture -- Chapter 11. Thiourea: A Potential Bioregulator for Alleviating Abiotic Stresses -- Part 3: Crop Based Mitigation Strategies -- Chapter 12. Improving Crop Adaptations to Climate Change: Contextualizing the Strategy -- Chapter 13. Biotechnological

Applications for Improvement of Drought Tolerance -- Chapter 14. Managing Abiotic Stresses in Wheat -- Chapter 15. Breeding Rice Varieties for Abiotic Stress Tolerance: Challenges and Opportunities -- Chapter 16. Abiotic Stress Tolerance in Barley -- Chapter 17. Sugarcane crop: Its Tolerance towards Abiotic Stresses -- Chapter 18. Abiotic Stress Management in Horticulture Crops -- Chapter 19. Impact of Climate Change on Vegetable Production and Adaptation Measures -- Part 4: Mitigation Options in Animal Husbandry -- Chapter 20. Nutritional Management for Sustaining Livestock during Drought -- Chapter 21. Mitigation Options for GHG Emissions from Ruminants -- Chapter 22. Mitigation of Climatic Change Effects for Sheep Farming in Arid Environment -- Chapter 23. Policy Support for Abiotically Stressed Agro-ecosystems: Challenges and Opportunities -- Chapter 24. Inculcating Resilience to Agriculture under Abiotically Stressed Environments: Synthesis and Way Forward.

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#### Sommario/riassunto

This book offers a state-of-the-art overview of on abiotic stresses in terms of the challenges; scope and opportunities; coping strategies for adaptation and mitigation using novel tools for building resilience in agricultural crops and livestock; as well as for policy implementation. Divided into four major parts: advances and prospects for understanding stress environments; adaptation and mitigation options; crop-based mitigation strategies; and mitigation options in animal husbandry, the book focuses on problem-solving approaches and techniques that are essential for the medium to long-term sustainability of agricultural production systems. The synthesis and integration of knowledge and experiences of specialists from different disciplines offers new perspectives in the versatile field of abiotic stress management, and as such is useful for various stakeholders, including agricultural students, scientists, environmentalists, policymakers, and social scientists.

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