



Technology-driven Agriculture To Face Imminent Future Challenges

Technology-driven Agriculture to Face Imminent Future Challenges presents a comprehensive and forward-looking overview of how emerging technologies can transform agriculture to address climate change, soil and water degradation, pests and diseases, and the rising demand for safe and nutritious food. It links scientific advances with field-level applications across crops, livestock, fisheries, food processing, and agribusiness to support resilient, sustainable and inclusive food systems.

Features

- The book integrates precision agriculture, remote sensing, artificial intelligence, biotechnology, digital decision-support tools and resource-efficient practices to enhance productivity, resilience and environmental stewardship in agriculture.
- It covers plant and soil health, plant disease and insect-pest management, organic and natural farming, waste valorization, water-quality monitoring, digital aquaculture, food processing technologies, and blockchain-enabled agribusiness supply chains in a single, coherent volume.
- The content is structured to serve postgraduate students, researchers, teachers, extension professionals, entrepreneurs and policy makers by combining conceptual clarity, case-based insights and future perspectives for technology-led, smallholder-inclusive agricultural development.

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