



Dr. Maya Bisen was born on 1st Sep.1998. She is presently working as Assistant professor, Department of Horticulture, Dr. APJ Abdul Kalam University. She is also awarded by Young Horticulturist Award, Excellence in research award, Best research scholar award, Best Academic & research award & Best thesis Award. She has Recognition awarded organising secretary on the occasion of 1st International Agriculture conference on Exploring Recent Innovations in Agriculture & Allied Sciences & Organising secretary award on the occasion of International Conference on OATHE 2025. She has the Executive member of Commerce & Industry Development Foundation (CIDF), New Delhi. She has the membership of several magazines and journals. She is also serving as scientific officer & Chief training coordinator of organising committee in Eco fast agri solution. She was contributed in publication of fourteen books, thirty book chapters, sixteen book Abstract, forty nine Articles, eighteen research papers, Nine Patent Design, Twenty one review Paper, five practical manual in national and international reputed journals and Magazines & various products in food processing & value added sector & is working on startup with trainees. She is committee member of Hindustan Agriculture research welfare society (HARWS). She has done research on "Influence of organic manures on growth, yield and quality of strawberry (Fragaria X ananassa) under Bundelkhand region". Her research also focused on "Studies on effect of organic nutrition practices on growth & yield parameters of Papaya (Carica Papaya L.) under precision farming techniques".



Mr. Sanjay Yadav is currently pursuing a Ph.D. in the Department of Soil Conservation and Water Management at Chandra Shekhar Azad University of Agriculture and Technology, Kanpur (U.P.). He completed his B.Sc. (Agriculture) (Hons.) from Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya (U.P.), and earned his M.Sc. in Soil Conservation and Water Management from Chandra Shekhar Azad University of Agriculture and Technology, Kanpur (U.P.). His academic and professional contributions include authorship of books, publications in reputed research journals and edited volumes, as well as several popular articles. He has actively participated in various trainings, seminars, workshops, and conferences, and holds life-time memberships in several professional and academic societies.



Dr. Vikas Singh was born in Kanpur district of Uttar Pradesh. He obtained his Doctorate in Soil Conservation and Water Management from Chandra Shekhar Azad University of Agriculture & Technology, Kanpur, Uttar Pradesh, where he also completed his graduation and post-graduation. He has made significant academic contributions through numerous research papers, review articles, book chapters, books, practical manuals, and abstracts. Dr. Singh is a patent holder in the field of soil and water management innovations and holds lifetime memberships in various professional and academic societies. He has actively participated in several national and international conferences and attended multiple training programs related to his area of specialization.



Dr. Satendra Kumar was born on 14th February 1985. He completed his B.Sc. (Ag) from Sardar Vallabh bhai Patel University of Agriculture and Technology, Meerut, followed by an M.Sc. in Agronomy from Chandra Shekhar Azad University of Agriculture and Technology, Kanpur, and a Ph.D. in Agronomy from G.B. Pant University of Agriculture and Technology, Pantnagar. Currently, Dr. Kumar is working as a Scientific Officer (Agro) in the Division of Agronomy at UPCSR-Genda Singh Sugarcane Breeding and Research Institute, Seorahi, Kushinagar, Uttar Pradesh. Previously, he worked as an Assistant Seed Officer at National Seeds Corporation Ltd. Dr. Kumar has received several honors, including the ICAR-SRF, Young Scientist Award, Best Agronomist Award, Distinguished Scientist Award, Best Poster Presentation Award, and Young Agriculture Scientist Award. He holds memberships in several professional magazines and journals. He has contributed extensively to academic literature, including books, book chapters, twenty book abstracts, numerous articles, thirty-five research papers, and review papers. He has organized two Kisan Melas and serves as Chairman of the Farm Advisory Committee and as a member of the Survey Committee at his institute. His research focuses on tillage, fertilizer management, modern planting techniques, organic farming, and weed management in sugarcane. Dr. Kumar has also managed ICAR-AICRP on sugarcane projects and projects funded by the U.P. Council of Sugarcane Research. He has participated in more than 50 national and international conferences and seminars.



Kunwar Akhand Pratap Singh has completed his B.Sc. (Ag) Hons. (2011-15) from CSJM University Kanpur, M.Sc. AG (Agronomy) from CSJM University, Kanpur (2019-21). Agronomy is his area of specialization. He has been working in ICAR-ATARI, Kanpur, Working in compilation of Project information like Progressive reports, area provided by the organization ARYA, TSP, SCSP, MGMG, Field data. He attended many seminar and workshops.



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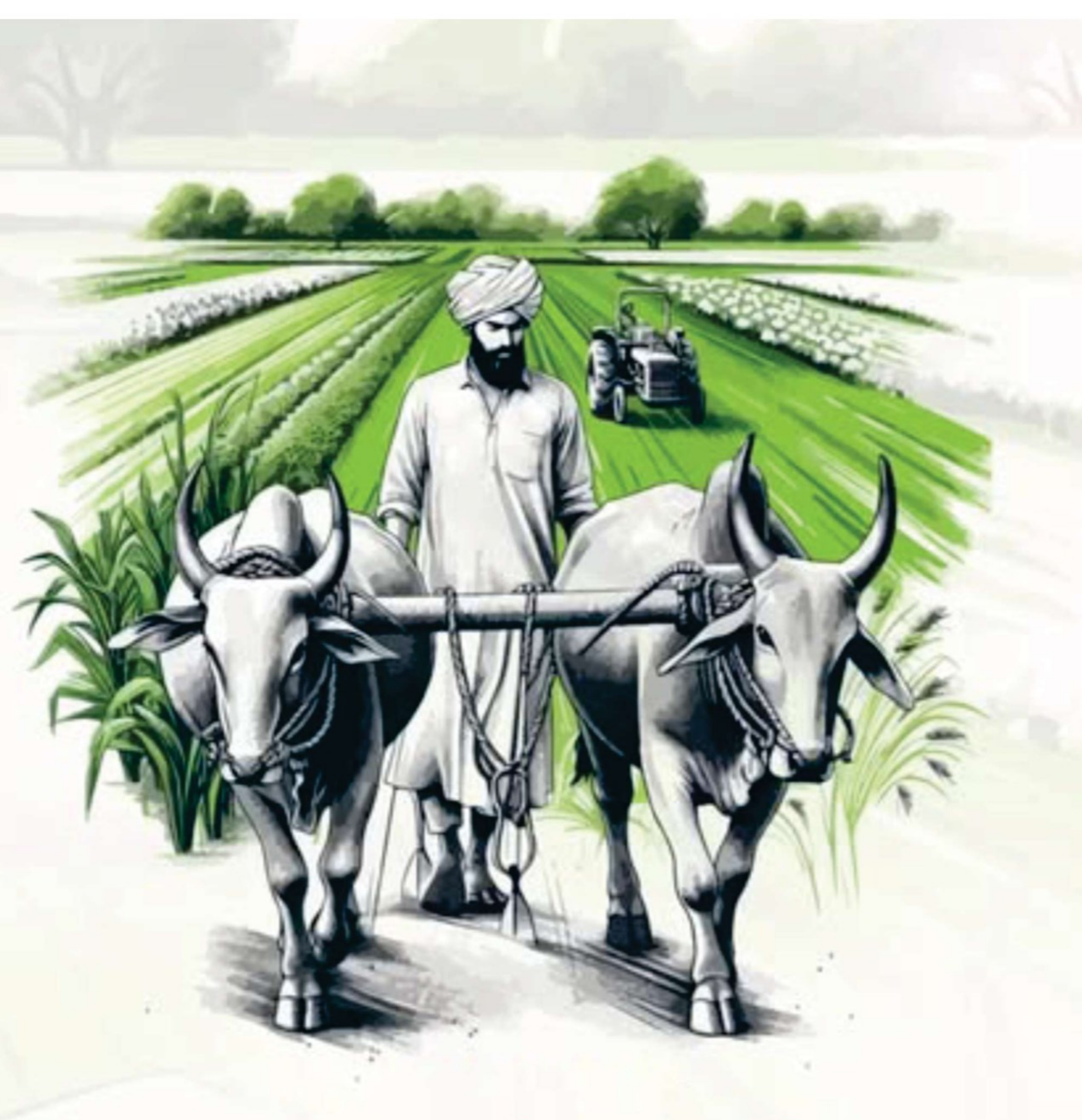


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Dr. Maya Bisen • Mr. Sanjay Yadav
Dr. Vikas Singh • Dr. Satendra Kumar
Kunwar Akhand Pratap Singh

Essentials of Agriculture



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**Dr. Maya Bisen • Mr. Sanjay Yadav
Dr. Vikas Singh • Dr. Satendra Kumar
Kunwar Akhand Pratap Singh**

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Chapter 20

Sustainability, Risk and Future Challenges in Agricultural Economics

Shazia Noor

PhD Scholar, Department of Economics, Integral University, India

Dr. Priyanshi Gupta

Assistant Professor (Economics), Department of Humanities and Social Sciences, Integral University, Lucknow, Uttar Pradesh, India.

Mohammad Danish Hussain

PhD Scholar, Department of Economics, Integral University, India

Abstract

Agricultural economics has traditionally focused on improving productivity, efficiency and farm incomes through better allocation of scarce resources. However, in the contemporary context, the discipline faces a far more complex and demanding task. Agriculture today operates under mounting pressures arising from environmental degradation, climate variability, market volatility, demographic changes and technological disruptions. Sustainability and risk have emerged as central themes shaping agricultural decision-making at farm, regional, national and global levels. This chapter presents an in-depth academic discussion on sustainability, risk and future challenges in agricultural economics. It examines the concept of sustainability in its economic, environmental and social dimensions; analyzes different forms of risk inherent in agriculture; and explores how farmers, institutions and policymakers respond to uncertainty. The chapter also reflects on emerging challenges such as climate change, resource scarcity, globalization, technological transformation and inequality.

Keywords: Sustainability, agricultural risk, climate change, resilience, uncertainty, agricultural economics, resource conservation, future challenges, farm livelihoods.