

## About The Book

"Emerging Trends in Agricultural Practices" delves into the dynamic landscape of modern agriculture, exploring innovative methodologies, technologies, and sustainable practices that are reshaping the industry. This comprehensive guide navigates the reader through a spectrum of transformative trends, from precision farming and agtech solutions to organic and regenerative practices. With a keen focus on addressing global challenges such as climate change, resource depletion, and food security, this book serves as a beacon for farmers, agronomists, researchers, and policymakers seeking to adapt and thrive in a rapidly evolving agricultural environment.

Through in-depth analyses, case studies, and expert insights, readers gain a nuanced understanding of the latest breakthroughs in crop management, soil health, and livestock husbandry. "Emerging Trends in Agricultural Practices" is a must-read for anyone passionate about cultivating a sustainable future for agriculture, blending traditional wisdom with cutting-edge innovations for a resilient and productive tomorrow.

**N D Global Publication House**  
31, Near Lakshmi Sagar Police Chowki  
Shahganj Haringtonganj Ayodhya  
Uttar Pradesh, Pin -224284, India.



Price : Rs. 449/-



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Priya Srivastava,  
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Chirag kumarMansukh bhai Bhaliya,  
Narinder Panotra and Vishnu Moond

# Emerging Trends in Agricultural Practices



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# Emerging Trends in Agricultural Practices

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N D Global Publication House 31, Near Lakshmi Sagar  
Police Chowki Shahganj Haringtonganj Ayodhya Uttar  
Pradesh, Pin -224284, India.



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978-81-968058-0-7

**Price:- 449/-**

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**ISBN NO:- 978-81-968058-0-7**

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## PREFACE

Welcome to "**Emerging Trends in Agricultural Practices.**" Agriculture has always been at the heart of human civilization, providing sustenance, livelihoods, and shaping the landscape of our societies. In recent years, the field of agriculture has witnessed a profound transformation driven by technological advancements, environmental concerns, and the need for sustainable practices.

This book aims to explore the dynamic landscape of modern agriculture, delving into the innovative practices, technologies, and methodologies that are shaping the future of farming. From precision farming and agroecology to digital agriculture and sustainable intensification, we embark on a journey through the cutting-edge trends that are revolutionizing the way we cultivate our crops, raise livestock, and manage our natural resources.

The chapters within this volume are authored by experts and thought leaders in the field, each contributing valuable insights into the challenges and opportunities presented by emerging trends in agricultural practices. We hope this collection serves as a comprehensive resource for researchers, practitioners, policymakers, and students interested in staying abreast of the latest developments in agriculture.

As we stand at the intersection of tradition and innovation, it is our sincere hope that this book sparks meaningful conversations, inspires further research, and contributes to the ongoing dialogue on sustainable and resilient agricultural practices. We extend our gratitude to all the contributors who have shared their expertise and experiences, making this collaborative effort possible.

May this book serve as a beacon guiding us towards a more productive, environmentally conscious, and equitable future for agriculture.

**Authors** 

## About the Author



Capt. Dr. Priya Srivastava is an Assistant Professor of St. Xavier's College (Autonomous), Ranchi. Apart from being a professor in the esteemed institution she is also the Associate NCC Officer of the NCC wing of the institution. She completed her graduation and post-graduation in Zoology from DDU, Gorakhpur University. She added a Silver Medal in post-graduation to her already massive pile of medals and certificates. She was awarded with PhD in 2004. She has authored and co-authored many research articles and book chapters in peer-reviewed journals. With her unparalleled determination and perseverance, currently she has two patents to her name. Her research work encompasses molecular biology, ecology, endocrinology, nanotechnology. She is also working on micro plastics- an alarming environmental concern.



Mr. Ninama Atulkumar Ramanbhai is a Ph.D. scholar in Agronomy at Junagadh Agricultural University, Junagadh, Gujarat, with a stellar academic record, significant research accomplishments, and a commitment to advancing knowledge in Agriculture. He has completed his under-graduation with first class & distinction from Anand Agricultural University, Anand, Gujarat. He has successfully completed his Master's degree with first class from the division of Agronomy, College of Agriculture, JAU, Junagadh. He has been awarded the prestigious SHODH (Scheme of Developing High-Quality Research) fellowship for his Ph.D. research work by the Government of Gujarat. He has also qualified for the ASRB-NET. His scholarly contributions extend to several peer-reviewed research and review papers published in renowned national and international journals. Moreover, Mr. Ninama has authored numerous book chapters and popular articles, solidifying his standing as a prolific researcher in the field of Agronomy.



Dr. Chiragkumar M. Bhaliya, a distinguished author and Assistant Research Scientist in the Department of Plant Pathology at College of Agriculture, Junagadh Agricultural University, Junagadh (Gujarat). Renowned for his profound excellence and exceptional academic achievements, he earned his undergraduate degree from Junagadh Agricultural University, Junagadh (Gujarat) with a remarkable feat of eleven gold medals in diverse agricultural subjects. His academic journey continued to soar as he successfully attained both master and doctorate degrees in Plant Pathology subject from Junagadh Agricultural University, Junagadh (Gujarat), solidifying his expertise in the field. His commitment to excellence extends beyond academia, as evidenced by qualifying the prestigious ICAR-NET examination in Plant Pathology subject.

A prolific writer, he has contributed significantly to the scientific community with numerous peer-reviewed research and review papers published in acclaimed

national and international journals. His literary footprint also includes several book chapters and popular articles that showcase his comprehensive understanding of plant pathology. Currently at the forefront of cutting-edge research, he is delving into the intricate world of endophytic microorganisms for plant disease management. Moreover, his work encompasses the application of AI tools in plant disease identification and forecasting, reflecting his commitment to innovation and the intersection of technology and agriculture.

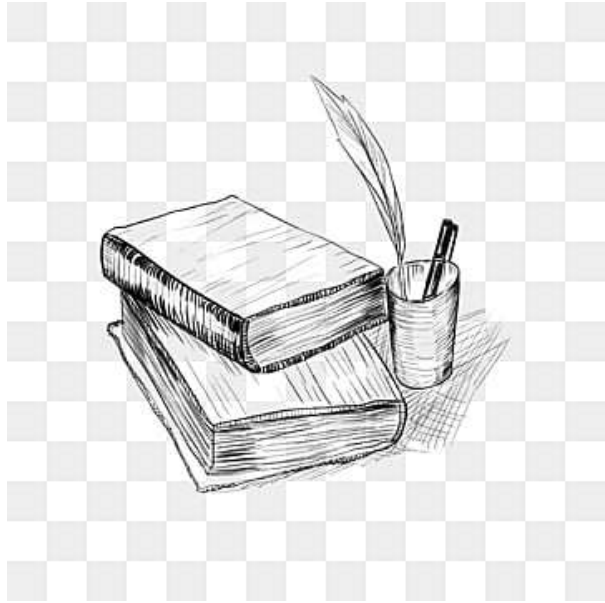


Dr Narinder Panotra is post-graduated in Agronomy (Crop Production) in 2003 from CCSU, UP. Dr Panotra focused on weed management research in Pulse crop during Ph.D in 2007; and presently working as Assistant Professor (Senior Scale) in the School of Biotechnology, Chatha, Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu since 2022. Dr Panotra started his professional career as a Research Associate (Agronomy) at the Indian Institute of Farming Systems Research, Modipuram in 2007 and he has served as Assistant Professor in the Directorate of Extension Education, Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar from 2009 to 2013. He has more than 15 years experience in teaching, research and extension. He has recipient of various national and international awards. His research interests are crop production, molecular breeding in cereal crops, biochemical analysis and research management. As an academician, he contributed 04 books in the field of agriculture including one text book and published more than 100 research and review papers in journals of national and international repute. He has an international exposure of visiting 04 countries. He has organized several mega events like Zonal workshop, Apple Conference, maize conference, pulses day, Science day, Basmati day, several national/ International conferences and symposia etc.



Mr. Vishnu Moond is an Assistant Professor of Agronomy in the Rabindranath Tagore College of Agriculture (MPUA&T-Udaipur), Kapasan, Chittorgarh, Rajasthan, with profound excellence and a meritorious academic record. Mr. Moond was born on 11th July, 1993 in Hanumangarh, Rajasthan. He has graduated in agriculture from HNB Garhwal (A Central) University, Uttarakhand, in 2014 with distinction in many subjects. He earned his M.Sc.(Ag) from SDS State Government University, Uttarakhand in the department of Agronomy in 2017 and qualified ASRB-NET Exam (2021). He has published 7 Abstracts and attend more than 22 national and international conferences, trainings and seminars and 12 research and review papers in acclaimed national and international journals along with 17 book chapters 10 popular articles in various agriculture magazines and 2 editor book's are also published by him. He has received M.Sc. Thesis Award and Best Agronomist & Best Teacher Award from recognized societies.

*Dedicated to My Beloved  
Parents*



Author ..... 

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