# SCHOOL OF AGRICULTURAL SCIENCE

# Report

on

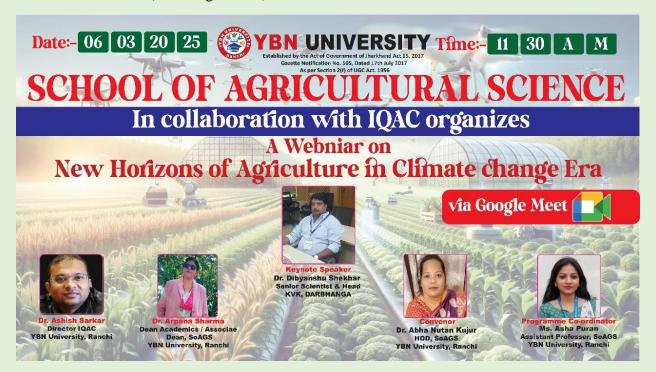
"New Horizons of Agriculture in Climate Change Era"

Organized by: School of Agricultural Science in collaboration with IQAC, YBN University

Date : 6th March 2025

Time : 11:30 AM

Mode : Online (via Google Meet)



#### Introduction

The School of Agricultural Science, YBN University, Ranchi, in collaboration with the Internal Quality Assurance Cell (IQAC), organized a significant webinar on "New Horizons of Agriculture in Climate Change Era" on 6th March 2025 at 11:30 AM. The webinar aimed to bring together scholars, experts, and students to deliberate on the various challenges and opportunities that climate change presents to the agricultural sector. With agriculture being one of the most vulnerable sectors affected by climate variations, the webinar provided a platform for exploring sustainable solutions and innovative practices to mitigate adverse effects and adapt to new realities.

### **Objectives of the Webinar**

The primary objectives of this webinar were as follows:

- To raise awareness about the impact of climate change on agriculture and food security.
- To discuss **innovative technologies** and practices that can help mitigate the adverse effects of climate change on farming systems.
- To explore **sustainable and resilient agricultural practices** for enhancing productivity in a changing climate.
- To provide a platform for students, researchers, and practitioners to share knowledge and experiences related to climate-smart agriculture.

### **Keynote Speaker:**

- Dr. Dibyanshu Shekhar, Senior Scientist & Head, Krishi Vigyan Kendra (KVK), Darbhanga.

Dr. Shekhar provided deep insights into how the agricultural sector is being impacted by climate change and elaborated on scientific and technological innovations required to combat these effects.

### **Highlights of the Webinar**

### **Inaugural Session:**

The session commenced with a welcome address by Dr. Arpana Sharma, who set the tone for the webinar by highlighting the urgency of addressing climate change impacts on agriculture. She emphasized the importance of academic discussions and collaborations for finding sustainable solutions.

Dr. Ashish Sarkar, in his opening remarks, shed light on how IQAC is working to promote quality education and research in emerging issues like climate change. He stressed the need for academic institutions to lead the way in fostering climate-resilient agricultural innovations.

## **Keynote Address:**

The keynote speaker, Dr. Dibyanshu Shekhar, delivered a highly informative presentation on the topic, covering various aspects:

#### - Impact of Climate Change on Agriculture:

Dr. Shekhar explained how erratic rainfall, rising temperatures, increased frequency of extreme weather events, and shifting growing seasons are directly affecting crop yields and livestock production.

### - Emerging Technologies in Agriculture:

He discussed climate-smart agriculture (CSA) practices, including drought-tolerant crop varieties, water-use efficiency technologies, precision farming, and integrated nutrient management.

The use of remote sensing, AI, and IoT in agriculture to monitor and mitigate climate risks was also emphasized.

### - Policy Recommendations and Community Involvement:

He highlighted the role of policymakers in creating frameworks that support farmers in adopting sustainable practices. Dr. Shekhar also spoke about the need for community-driven solutions, capacity building, and farmer education programs to increase resilience.

#### **Interactive Session:**

An engaging Q&A session followed, where participants posed insightful questions about practical aspects of implementing climate-resilient farming practices. Dr. Shekhar answered all questions in detail, encouraging participants to think innovatively about solutions tailored to local conditions.

### **Key Takeaways from the Webinar**

- Climate change poses significant threats to global and local agricultural systems, impacting crop production, livestock, soil health, and water availability.
- Technological innovations such as precision agriculture, controlled environment farming, and biotechnology are vital for future agricultural resilience.
- Adopting climate-smart agricultural practices can help reduce greenhouse gas emissions and ensure food security.
- Collaborative efforts between research institutions, policymakers, and farming communities are essential to implement effective mitigation and adaptation strategies.
- Awareness and education are crucial for empowering farmers to adopt sustainable agricultural methods.

#### **Vote of Thanks**

The formal vote of thanks was delivered by Ms. Asha Puran, Programme Coordinator, who expressed her heartfelt gratitude to all the dignitaries, keynote speaker, participants, and organizing committee members for making the webinar a grand success. She acknowledged the enthusiastic participation of students and the valuable contributions of faculty members, emphasizing the need to continue such academic engagements.

#### **Conclusion**

The webinar on "New Horizons of Agriculture in Climate Change Era" was a highly informative and insightful event that succeeded in its goal of raising awareness and promoting dialogue on climate change impacts in agriculture. It provided participants with updated knowledge and practical approaches for combating climate-related challenges through innovative and sustainable agricultural techniques.

