

#### Brief report on Kisan Goshti organized by Department of Agriculture, IIAST in Palka Village on "Modern Agricultural Techniques for Advancing Rural Development" (ग्राम विकास की दिशा में आधुनिक कृषि तकनीक")

Modern agricultural techniques are pivotal in transforming rural economies, ensuring food security, and improving the livelihood of farmers. Adopting advanced technologies like precision farming, sustainable irrigation systems and digital agriculture tools can enhance productivity, reduce input costs and address the challenges of climate change. These techniques empower farmers with knowledge, tools and strategies to maximize yields and contribute to the socio-economic development of rural areas. In view of this Department of Agriculture, IIAST, Integral University, Lucknow organized a Kisan Goshti on 20 November 2024 in Palka Village to sensitize farmers on "Modern Agricultural Techniques for Advancing Rural Development."

The Gosthi was observed under the guidance of Prof. Mohd Haris Siddiqui, Director, Integral Institute of Agricultural Science and Technology and Prof. Saba Siddiqui, Head, Department of Agriculture, IIAST. The faculty coordinators Dr. Khalid Habib, Dr Akanksha Singh and Dr. Abhineet, Dr. Sampurnanand along with supporting staff Mr. Syed Faisal Ahmad Kirmani shared valuable insights into innovative practices and technologies that could revolutionize traditional farming methods.

Dr. Khalid Habib discussed about soil testing and mapping to analyze nutrient levels and pH, enabling precise fertilizer application. He also discussed about Soil moisture sensors which helps to monitor water content for optimized irrigation and biofertilizers and microbial inoculants to enhance soil fertility.

Dr. Akanksha Singh highlighted about several government initiatives to promote the adoption of modern agricultural techniques, such as the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) for efficient irrigation, the National Mission for Sustainable Agriculture (NMSA) for climate-resilient farming and the Soil Health Card Scheme to improve soil fertility. She also discussed about the Digital India Initiative which supports digital tools and platforms for farmers. These schemes aim to modernize agriculture and uplift rural communities.



Dr. Abhineet discussed the benefits of adopting crop diversification and high-yielding varieties to enhance food security and resilience against pests and diseases. He also emphasized on crop rotation and cover cropping to improve soil structure and reduce pest cycles, and no-till farming which minimizes soil erosion and retains soil moisture, promoting long-term soil productivity.

Dr. Sampurnanand shared insights on modern techniques in horticultural crops which includes protected cultivation (greenhouses and polyhouses) to create controlled environments for better yield and quality and drip irrigation with fertigation, which ensures precise water and nutrient delivery to plants.

The Kisan Goshti was a significant step toward empowering farmers in Palka Village with knowledge and tools to adopt modern agricultural practices. The Goshti was attended by 22 farmers and students of B.Sc. (Hons.) Agriculture. The interactive session allowed farmers to discuss their challenges and seek practical solutions from experts. The active participation of students provided them with real-world learning opportunities, fostering a collaborative approach to advancing rural development. This initiative reflects the Department of Agriculture, IIAST's commitment to integrating modern technology and sustainable practices into rural farming systems.

Glimpses of the Goshti









