

#### Report on Kisan Goshthi in Khwaja ka purwa village on "Role of Organic Farming in Quality Improvement and Seasonal Challenges"

Organic farming plays a significant role in improving the quality of agricultural produce while addressing seasonal challenges. By emphasizing the use of natural inputs such as compost, biofertilizers, and crop rotations, organic farming enhances soil fertility, promotes biodiversity, and reduces chemical residues in crops. This approach results in healthier, nutrient-rich produce with improved taste and market value. However, seasonal challenges like unpredictable weather, pest infestations, and lower initial yields can pose obstacles. Organic practices such as cover cropping, mulching, and the use of resistant crop varieties help mitigate these challenges by improving soil resilience and protecting crops against adverse conditions. Overall, organic farming fosters sustainable agriculture while maintaining high-quality produce. In view of this Department of Agriculture, IIAST, Integral University, Lucknow organized a Kisan Gosthi on 26 October 2024 in Khwaja ka Purwa Village to sensitize farmers on "Role of Organic Farming in Quality Improvement and Seasonal Challenges".

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. Malik Mobeen Ahmad, Dr. P. Smriti Rao, Dr. Nitish Kumar, Dr. Muzeev Ahmad and Dr. Pallavi Srivastava shared valuable insights into practices and technologies that could transfigure organic farming methods.

Dr. Malik elaborated on the importance of pest and disease management in organic farming. He explained the use of natural pest control methods such as neem-based bio-pesticides, trap cropping, and integrated pest management (IPM). These techniques reduce dependence on chemical pesticides while effectively controlling pests, especially during vulnerable seasonal phases, thus ensuring healthier crops.

Dr. Smriti emphasized that organic farming enhances the nutritional value and taste of produce by avoiding chemical fertilizers and pesticides. Instead, natural inputs such as compost, bio-fertilizers, and green manure enrich the soil and improve its fertility. Crop rotation and intercropping were highlighted as effective strategies to maintain soil health and reduce disease incidence. The result is healthier, chemical-free crops with better market value and consumer demand.



Addressing seasonal challenges, Dr. Nitish discussed how organic methods such as mulching, cover cropping, and the use of drought- or pest-resistant varieties could help farmers adapt to fluctuating weather conditions. He highlighted the importance of timely sowing and irrigation management to counter erratic rainfall and temperature shifts. Organic pest control techniques, including the use of biopesticides and companion planting, were recommended as sustainable solutions to reduce crop damage during seasonal peaks.

Dr. Muzeev discussed the economic benefits of organic farming, especially in the context of quality improvement. He noted that organically grown crops often fetch higher market prices due to their premium quality and consumer demand. However, he also acknowledged the challenges of lower initial yields and the need for certification processes, urging farmers to view organic farming as a long-term investment for both profitability and sustainability.

Dr. Pallavi summarized strategies for adopting organic farming despite seasonal challenges. He advised farmers to focus on climate-resilient crop varieties, diversify cropping systems, and adopt precision farming techniques compatible with organic principles. She concluded by encouraging farmers to form organic farming cooperatives to share resources and knowledge, making the transition to organic farming more feasible and effective.

The Goshthi provided valuable insights into the benefits and challenges of organic farming. The Goshti was attended by 30 farmers and students of B.Sc. (Hons.) Agriculture. Experts emphasized that while organic farming significantly improves crop quality and promotes sustainability, addressing seasonal challenges requires careful planning and resilient farming practices. Farmers expressed interest in adopting organic methods and sought guidance on practical implementation, making the session highly productive and engaging. The Department of Agriculture, IIAST's dedication to incorporating organic farming methods and technologies into rural farming systems is reflected in this effort.

#### **Glimpse**















