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Report on Workshop: Post-Harvest Technology at Shikohpur KVK

Organized by: School of Agricultural Sciences, K.R. Mangalam University & NSS

Date: 20 November 2023
Venue: Krishi Vigyan Kendra (KVK), Shikohpur
Event Type: Extension Activity (Offline)
Target Group: Village residents & SOAS students
Convener: Dr. J.S. Yadav
Faculty Coordinators: Dr. Neha Sharma, Dr. Parita, Dr. Rabiya Basri
Resource Persons: Dr. Anamika Sharma, Dr. Kavita Bisht, Dr. Bharat, staff members
Participants: 35 SOAS students, 13 plus villagers

Introduction

This extension activity included a workshop that aimed to promote awareness about post-harvest management of fruits and vegetables, focusing on preservation techniques and value addition through scientific processing. The event aligned with NSS outreach and the International Year of Millets (2023), integrating agricultural extension and nutritional promotion in rural settings.

Key Activities

The workshop featured several engaging and informative activities aimed at enhancing participants' knowledge of post-harvest technology. Dr. Kavita Bisht conducted technical demonstrations, explaining and practically showcasing methods to preserve highly perishable produce. A special focus was placed on extending the shelf life of fruits, such as transforming Indian gooseberry (*amla*) into various processed products to ensure their availability during off-seasons. The educational sessions highlighted the growing global recognition of millets in 2023 and their potential applications in bakery products. Participants also gained hands-on experience in the proper handling, processing, and preservation techniques for fruits and vegetables, reinforcing the importance of scientific approaches to food processing.

Causes of Post-Harvest Losses

The discussions revealed several critical factors contributing to post-harvest losses. These include poor handling practices leading to physical damage and spoilage, and the absence of adequate storage, cooling, and transport infrastructure. Limited awareness regarding sorting, grading, and packaging further exacerbates wastage, while fluctuations in temperature and humidity cause rapid decay. Additionally, inadequate pest and disease control during storage, excessive ethylene gas emissions accelerating spoilage, and restricted market access result in delays and losses. Financial constraints often hinder the adoption of modern technologies, while insufficient packaging and transport facilities reduce product quality. Market rejection based solely on appearance rather than nutritional value also contributes significantly to overall losses.

Benefits and Importance of Post-Harvest Processing

Post-harvest processing plays a crucial role in maintaining the quality of produce by preserving its nutritional, sensory, and hygienic standards. It contributes to the extension of shelf life, enabling prolonged storage and reducing food waste. Through effective sorting, grading, and packaging, it minimizes physical damage and spoilage. Moreover, value addition through processing transforms raw produce into new, marketable products, increasing profitability. Emphasizing food safety and hygiene, post-harvest techniques reduce microbial risks and ensure healthy consumption. Economically, such practices enhance farmer income, generate employment opportunities in rural areas, and promote sustainable agriculture. On a broader scale, adherence to quality standards supports international trade, opening avenues for export and global recognition of Indian agricultural products.

Conclusions

The workshop yielded significant learning outcomes. Students and villagers gained practical exposure and developed hands-on skills in post-harvest handling, processing, and preservation technologies.

Outcomes:

Participants became more aware of the importance of food processing in reducing waste and creating economic opportunities. The session successfully inspired suggestions for conducting regular workshops on related topics to continually enhance knowledge and strengthen the community’s capacity for sustainable agricultural development.

Dr. Bharat explained the benefits of post harvesting

Students during workshop of post-harvest techniques reduce microbial risks and ensure healthy consumption.