## Visit to CAPOL, Chirala and PHTC, Bapatla on 30-09-2024

### **Objectives of the visit**

- To gain an understanding of the processes and technologies involved in cotton seed oilextraction and refinement.
- To explore the technological advancements in post-harvest handling, storage, and preservation methods.

## **Description of the event**

The KL College of Agriculture visited the Coromandel Agro-Products & Oils Limited (CAPOL), Chirala, a significant facility dedicated to the processing of cotton seeds to produce high-quality cottonseed oil. In addition to that, Post-Harvest Technology Centre, Ag College Bapatla, was visited. The visit to CAPOL aimed to gain an understanding of the processes and technologies involved in cotton seed oil extraction, refinement and utilization of biproducts while the visit to PHTC aimed to explore the various technologies available at PHTC for processing and value addition to the agricultural products

## **Activities Observed at CAPOL:**

- Oil Extraction Process: The visit provided a detailed look into the steps involved in extracting oil from cotton seeds, including cleaning, dehulling, and pressing. The plant employs both mechanical and solvent extraction methods to optimize oil yield.
- **Refining Techniques:** The refining section showcased processes such as degumming, neutralization, bleaching, and deodorization to ensure the production of edible-grade oil.
- **By-Products Utilization:** The plant effectively utilizes by-products like cottonseed meal and hulls for livestock feed and as organic agricultural inputs.
- Quality Assurance: Rigorous quality control protocols were observed, ensuring that the oil meets industry and food safety standards, including chemical analyses and sensory evaluations

#### **Activities Observed at PHTC:**

- Students observed various technologies developed for millet processing, groundnut decortication, chili pulverization, grading of brokens from head rice, rice flaking machine, spray drier etc.
- The center showcased mango processing technology right from peel removal to end pulp processing.
- Preservation technologies like drying and dehydration techniques were visited, showing their effectiveness in reducing spoilage.
- Students visited smart rice cooker which was developed with the aim to reduce the sugar content in rice.

# **Outcome of visit:**

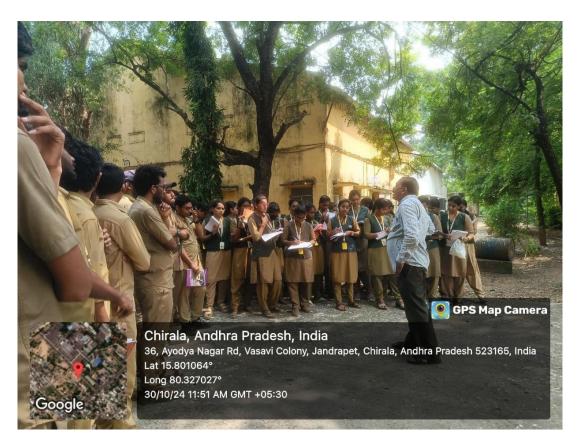
- 1. Students gained practical exposure to real-world processing technologies, and sustainable methods.
- 2. Students also developed valuable skills and insights that bridge academic learning withindustry applications.



# Overview of processing technologies at PHTC, Agricultural College, Bapatla



Post-Harvest Technology Centre, Agricultural College, Bapatla



## Overview of processing technologies at CAPOL, Chirala



Coromandel Agro-Products and Oils Limited (CAPOL), Chirala