

Auxilium College (Autonomous)

(Accredited by NAAC A+ Grade with a CGPA of 3.55 out of 4 in the 3^{rd} cycle) Gandhi Nagar, Vellore $-632\ 006$











Title of Event: Exposure and Field Visits for Problem Identification: Aligning with UN SDGs and Exploring Emerging Areas of Technologies

Date of Session: 01/ December 2024

Time: 09.00 AM

The Aloe Vera training is connected to multiple SDGs:

- SDG 3 (Good Health & Well-being): Aloe Vera is widely used in healthcare and wellness. Exploring its medicinal benefits aligns with promoting health.
- SDG 8 (Decent Work & Economic Growth): Training in Aloe Vera cultivation and processing can create employment opportunities and entrepreneurial ventures.
- SDG 9 (Industry, Innovation & Infrastructure): The visit explored the value-added Aloe Vera products using emerging technologies like bioprocessing and nanotechnology in healthcare.
- SDG 12 (Responsible Consumption & Production): Sustainable farming methods and eco-friendly Aloe Vera product development promote responsible production.
- 2. Problem Identification through Field Exposure

During the visit, students observed and analysed the

- Challenges in Aloe Vera cultivation (soil conditions, water management, organic farming practices).
- Processing difficulties and the scope for innovation in product formulation.
- Market gaps and opportunities for startups in Aloe Vera-based health and cosmetic products.
- Socioeconomic impact on farmers and workers involved in the Aloe Vera industry.
- 3. Exploring Emerging Technologies in Aloe Vera Processing
 - Biotechnology: Enhancing Aloe Vera's medicinal properties through bioengineering.

- Nanotechnology: Developing Aloe Vera-based nanomedicines for enhanced skincare and wound healing.
- IoT & AI in Agriculture: Smart irrigation and AI-based plant health monitoring.
- Green Chemistry: Eco-friendly extraction techniques for Aloe Vera gel and bioactive compounds.

A practical exposure to agribusiness, a training session was conducted at an Aloe Vera field. 25 Students from Department of Commerce (Banking and Insurance), Auxilium College participated in the training program. Students learned how to develop natural chemical –free hair care products.



