

# SOWMYA PALANICHAMY

Agricultural Engineer & Sustainability Specialist

📍 Milan, Italy | ✉ sowmyavivin22@gmail.com | 🎂 12 Nov 1997



**Summary:** Motivated M.Sc. graduate from Politecnico di Milano with a strong foundation in Agricultural Engineering, LCA, and process optimization. Combines analytical skills in resource management with practical experience in data analysis.

## WORK EXPERIENCE

<b>Scientific Collaborator</b> <i>AgroTIE</i> <ul style="list-style-type: none"><li>Completed specialized hydroponics training (Indo-Dutch CoE).</li><li>Managed Tomato, Capsicum, Cucumber in semi-automated greenhouse.</li><li>Expertise in fertigation, substrate, and disease management.</li></ul>	08/2024 -- 01/2025 Bengaluru, India
<b>Client Services Advisor</b> <i>Farmagain</i> <ul style="list-style-type: none"><li>Collaborated with sales to offer product bundles to customers.</li><li>Presented insights to senior management for strategic initiatives.</li></ul>	12/2020 -- 02/2021 Coimbatore, India
<b>Farming Associate</b> <i>Del Monte Foods</i> <ul style="list-style-type: none"><li>Training in raw material sourcing and quality control.</li><li>Managed raw material processing and coordinated delivery needs.</li></ul>	09/2019 -- 09/2020 Hosur, India

## PUBLICATIONS

<b>Implementation of Dutch Farming in South India</b> <i>Master's Thesis, Politecnico di Milano</i>	Nov 2025
Developed a sustainable passive hydroponic system for tropical climates, demonstrating significant water savings and nutrient reduction.	

## PROJECTS

<b>High-Tech Entrepreneurship</b> Business proposal for recycling plastic into 3D printing filaments.	01/2024
<b>Materials for Agriculture</b> Analyzed nutrient delivery methods and material efficiency for crops.	01/2024 -- 03/2024
<b>Environmental Engineering (LCA)</b> Analyzed Caviro Extra's LCAs and KPIs related to SDGs.	09/2023 -- 12/2023
<b>Organic Cotton Supply Chain</b> Mapped innovative solutions for Indian Cotton with Fairtrade.	09/2023 -- 12/2023
<b>Control of Batch Chemical Process</b> Simulation of process control using Arduino board and PLC.	02/2023 -- 04/2023
<b>Seed Ball Making Machine</b> Design and development of automated seed ball machinery.	03/2019 -- 10/2019

## EDUCATION

<b>M.Sc. Agricultural Eng.</b> <i>Politecnico di Milano, Italy</i> 09/2022 -- 09/2025
<b>B.E. Agriculture Eng.</b> <i>Sri Shakthi Institute, India</i> 08/2016 -- 10/2020

## SKILLS

### Technical

- Life Cycle Assessment (LCA)
- Hydroponics & Precision Ag
- Irrigation Management
- Food Quality Management
- AutoCAD & SolidWorks
- Ansys Simulation
- Data Analysis

### Languages

- English (Native)
- Italian (Professional)

## CERTIFICATIONS

- Autodesk AutoCAD User**  
(12/2017)
- Soil & Water Conservation**  
ICAR (09/2018)
- Health and Safety**  
Polimi (05/2023)
- Mechanized Farm Power**  
Sri Shakthi Inst. (07/2017)
- Tractor Operation**  
Govt of India (07/2019)

## TRAININGS

- Internship Training**  
Del Monte Foods (02/2020)
- In-Plant Training**  
AAVIN (07/2019)
- Practical Aspects in Ag.**  
National Seeds (09/2018)

## PERSONAL DETAILS

**Nationality:** Indian

**Location:** Milan, Italy