

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

Scientific Collaborator <i>AgroTIE</i>	08/2024 -- 01/2025	Bengaluru, India
• Completed specialized hydroponics training (Indo-Dutch CoE). • Managed Tomato, Capsicum, Cucumber in semi-automated greenhouse. • Expertise in fertigation, substrate, and disease management.		
Client Services Advisor <i>Farmagain</i>	12/2020 -- 02/2021	Coimbatore, India
• Collaborated with sales to offer product bundles to customers. • Presented insights to senior management for strategic initiatives.		
Farming Associate <i>Del Monte Foods</i>	09/2019 -- 09/2020	Hosur, India
• Training in raw material sourcing and quality control. • Managed raw material processing and coordinated delivery needs.		

PUBLICATIONS

Implementation of Dutch Farming in South India	Nov 2025
<i>Master's Thesis, Politecnico di Milano</i>	

Developed a sustainable passive hydroponic system for tropical climates, demonstrating significant water savings and nutrient reduction.

PROJECTS

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

EDUCATION

M.Sc. Agricultural Eng.
<i>Politecnico di Milano, Italy</i>
09/2022 -- 09/2025

B.E. Agriculture Eng.
<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