

US Ag Tech Expert at J.J. College Proclaims AI in Agriculture as the 'Need of the Hour' to Revolutionize Global Farming

*Ohio State University Professor Dr. Subbu Kumarappan Charts the Future of Smart Farming via
Global Startups at Landmark International Seminar*

Pudukkottai, July 20, 2026

In an era challenged by climate volatility and growing food demands, integrating **Artificial Intelligence (AI)** into farming has truly become the "need of the hour." This critical message took center stage at J.J. College of Arts and Science (Autonomous), Pudukkottai, during a high-profile **International Seminar titled "AI Applications in Agriculture - A Short Survey of Startup Companies."** The landmark event was jointly organized by the Department of Information Technology and the PG & Research Department of Biotechnology, attracting a packed audience of management executives, faculty, and future-forward students.

The highlight of the international seminar was an illuminating keynote address delivered by renowned foreign speaker **Dr. Subbu Kumarappan, Ph.D., an Associate Professor from the Agricultural Technical Institute at Ohio State University, USA.** Drawing from extensive global research and real-world market dynamics, Dr. Kumarappan provided a comprehensive survey of contemporary **AgTech startup companies** that are leading a digital disruption on farms worldwide. He emphasized that traditional agriculture must rapidly evolve by adopting intelligence-driven infrastructure to meet global sustainability targets.

During his technical address, Dr. Kumarappan broke down five transformative technological pillars currently reshaping the industry:

1. **AI & Machine Learning (AI & ML):** Empowering growers with predictive capabilities for real-time crop health monitoring, early pest detection, and yield optimization.
2. **Data Analytics:** Turning massive field datasets into highly actionable insights to mitigate climate risks and smartly manage resources.
3. **Smart Farming:** Utilizing interconnected IoT networks and cloud ecosystems to centralize and automate everyday field operations.
4. **Precision Agriculture:** Directing advanced tools like drone systems and GPS mapping to accurately dispense water, fertilizers, and eco-friendly pesticides, completely eliminating operational waste.
5. **Technological Innovation:** Inspiring young tech graduates to cultivate an entrepreneurial mindset and launch high-impact startups tailored to regional agronomic bottlenecks.

The event commenced earlier at 11:00 a.m. with an official welcome address by **Dr. G. Manigandan**, Convener and Head of the Department of Biotechnology. The **College Principal Dr J Parasuraman** delivered the presidential address, commending the inter-departmental synergy between IT and Biotechnology. The Principal noted that cross-disciplinary innovation is

the prime engine driving next-generation solution-building, positioning J.J. College at the cutting edge of **global academic and research developments**.

The international seminar concluded on a high note, effectively igniting new academic research avenues and inspiring students toward global AgTech entrepreneurship. The formal proceedings closed with a vote of thanks proposed by **Dr. R. Manimaran, Organizing Secretary** and Head of the Department of Information Technology, who expressed deep gratitude to the management, the distinguished foreign speaker, and the participants for orchestrating a highly impactful event.

-Principal