

Tropical Agro Unveils AI – enabled Tech Tools to tackle India's 7 million tonnes Fruit Loss Problem

To roll out globally acclaimed Strella and Rubens technologies in India to curb post-harvest wastage and boost farmer profitability

Chennai, 11th September 2025: Tropical Agrosystem (India) Pvt. Ltd., India's largest homegrown crop management company, today announced a transformative farm-tech suite that leverages data analytics and advanced technology to minimise post-harvest fruit losses, preserve product quality, and boost farmer incomes.

In a strategic partnership with $AgroFresh^{TM}$ Solutions Inc., a global leader in post-harvest freshness and quality solutions, Tropical Agro is bringing two globally acclaimed innovations—**Strella** and **Rubens**—to the Indian market after the successful launch of SmartFreshTM and SmartFreshTM InBox. The introduction of these technologies comes at a critical juncture, as post-harvest wastage remains a persistent challenge for India's agricultural sector.

A 2020–2022 study by NABARD Consultancy Services (*NABCONS*) estimated annual fruit losses in India at **7.36 million tonnes**, with wastage ranging from **6.02% to 15.05%**. The resulting economic loss is pegged at approximately **₹29,500 crore**. Apples alone witness a post-harvest loss of around **9.51%**, as per NABCONS data, and an earlier ICAR-CIPHET report placed this figure even higher at **10.39%**.

Key reasons for such losses include fruit dropping during harvesting, improper handling, lack of scientific post-harvest practices, and over-ripening—underscoring a serious gap in monitoring infrastructure and advanced harvest maturity tools.

To address these gaps, Tropical Agro is rolling out **Strella** and **Rubens**, both seamlessly integrated with **AgroFresh's FreshCloud™**, a digital platform that captures real-time data to inform better post-harvest decisions of produce condition from orchard to packhouse, shipping and beyond - across the supply chain.

"Tropical Agro sees significant growth potential in India's post-harvest segment, which will remain a key strategic focus for the company," said Mr. V. K. Jhaver, Founder of Tropical Agrosystem (India) Ltd.

"Given the complexities of India's supply chain and the resulting food wastage, Strella and Rubens offer ideal solutions to reduce post-harvest losses, maintain product quality, and improve grower profitability. We look forward to introducing more such innovations in the future."

"This initiative reflects our ongoing commitment to delivering sustainable, tech-driven solutions that benefit the entire agri value chain—from farm to consumer," added K. Venkatasubramanian, General Manager – Post Harvest Business, Tropical Agrosystem (India) Pvt. Ltd. "Our focus is on reducing post-harvest losses—particularly in apples—preserving quality, and enabling smarter, data-led decision-making across the agricultural ecosystem."

About the Technologies:

Strella

Developed by AgroFresh^{\mathbb{M}}, *Strella* uses wireless sensors to monitor **ethylene** (a natural ripening agent emitted by fruits), CO_2 & O_2 , temperature & humidity in real time. These sensors are deployed in **Controlled Atmosphere (CA) storage rooms** to track fruit maturity. CA Stores can access **live**, **data-backed recommendations** through FreshCloud^{\mathbb{M}} to optimize storage decisions, reduce waste, and enhance fruit marketability.

Rubens

Developed by Australian agri-tech firm *Rubens Technologies*, this **handheld spectral scanner** allows farmers to assess fruit maturity **non-destructively**—right in the orchard. It measures indicators such as **brix**, **firmness**, **and starch levels** to determine the optimal harvest window. At the packhouse/CA Stores, Rubens also aids in **quality control**, syncing results to **FreshCloud™ Inspection** within seconds, enabling traceability and data-driven decision-making.

Both technologies will initially be available for **apples and pears**, with plans to expand to other fruits and vegetables in the future. In India, *Strella* and *Rubens* will be offered under a **subscription-based model**, making advanced post-harvest tools more accessible to Indian growers and supply chain stakeholders.



About Tropical Agrosystem (India) Pvt. Ltd.

Established in 1969, Tropical Agro is a leader in India's crop protection and plant nutrition industry, with a diversified portfolio across Chemical, Biological, and Organic segments. A part of the Jhaver Group, the company is dedicated to empowering farming communities and advancing responsible, sustainable farming practices across the country.

Recognized for its unwavering commitment to innovation, quality, and environmental stewardship, Tropical Agro has earned numerous accolades, including the ICFA, AIASA, IEDRA, and BioAg India awards. The company is certified with globally recognized standards such as ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, WHO-GMP, IMO, DSIR, NABL, and TUV SUD South Asia, highlighting its excellence and adherence to the highest industry standards.

With a robust turnover of ~USD 200 million, the company operates a comprehensive farm-to-consumer value chain, impacting over 8 crore farmers. Its operations are powered by 20,000+ distributors and retailers, 4,000+ field assistants, and 1,100 employees, delivering 300+ crop solutions, ranging from seed treatment to post-harvest care, developed across 7 manufacturing facilities and 3 R&D hubs.

Addressing pressing global challenges such as food security, soil health preservation, and safe farming practices, Tropical Agro remains at the forefront of revolutionizing agriculture. Guided by a vision of sustainable growth, the company continues to champion India's ambition to become the "Food Basket of the World."

About AgroFresh Inc., USA

AgroFresh is the global leader in post-harvest quality and freshness solutions that enhance quality and extend shelf-life of fresh produce, reducing food loss and waste. AgroFresh has been innovating for more than 40 years to address fresh produce supply chain challenges from all angles with a full suite of integrated storage, packing line and digital solutions. As the pioneer of SmartFreshTM, the world's first introduction to 1-MCP technology used to slow ripening, and UvasysTM, the world's first laminated SO₂ generating sheets that prevent fungal decay in produce, AgroFresh empowers growers, packers and retailers to succeed in delivering fresh, quality and sustainable produce from harvest to home. To learn more about AgroFresh, visit www.agrofresh.com.

For further enquiries, please contact:

Ms. Chandrika Rodrigues

General Manager – Branding & Communications, Tropical Agrosystem (India) Pvt. Ltd.

Mobile: +91 9500219262

Email: chandrika.v@tropicalagro.com

Mr. Vivek Nair

Head - Content & Research Streetlight Media Pvt. Ltd. Mobile: +91 9029001245

Email: vivek.nair@streetlightmedia.in