AgroSpectrum ASIA
Envisaging Future | Updating Present

Semtechâ??s LoRaÂ® Chip-to-Cloud platform enables sustainable farming in Malaysia

14 May 2023 | News

Semtechâ??s LoRa devices and gateways utilizing LoRaWANÂ® help to improve farming practices, lower operational costs and increase crop yields

Semtechâ??s LoRa devices and gateways utilizing LoRaWANÂ® help to improve farming practices, lower operational costs and increase crop yields

Semtech Corporation, a global firm specializing in high-performance semiconductors, IoT systems, and Cloud connectivity services is enabling Greater Malaysia's Durian fruit farms by enabling local firm Sustainable Hrvest Sdn Bhd (SH) with its LoRa-enabled sensors and LoRaWAN-based gateways.

Durian trees are challenging to grow and harvest as they are sensitive to weather and moisture conditions and need 24X7 maintenance for high yields. LoRa-enabled sensors will enable Malaysian farmers with real-time data on the condition of their farms at every step of the growth cycle from pre-harvest, harvest, until post-harvest. Farmers are benefiting from this real-time visibility.

LoRa is the de facto wireless platform for the Internet of Things (IoT). Semtech's LoRa chipsets connect sensors to the Cloud and enable real-time data communication and analytics. This instantaneous management enhances the efficiency and productivity of sustainable IoT use cases.

Globally, there are more than 300 million LoRa end nodes deployed across a wide array of customer applications from agriculture and healthcare to industrial and transportation and more.

â??Malaysian farmers are looking froward to improving farming practices, reducing operational costs, and helping farmers deliver better yields. Semtechâ??s LoRaÂ® Chip-to-Cloud platform fits our needs perfectly for crop management. LoRa monitors the trees, alerts the farmer if there is an issue, and allows them to take immediate action. This response saves time

and mitigates potential tree loss and revenue. Sustainable IoT and LoRa have completely overhauled farming in Malaysiaâ? said Han Wei, co-founder, and chief technology officer at SH.

Currently, there are 30 LoRa-powered farms in Malaysia with new plantations expected to become live in 12 months. Designed by Sustainable Hrvest, the IoT nodes utilizing LoRaWAN implement LoRaâ??s low-power, long-range sensors. They last four years in the field without needing replacement. This purpose-built chip-to-Cloud sensor platform monitors the flow rate and pressure of irrigation systems to maintain soil moisture levels. It also tracks nutrients in the soil. The data-driven farming practice gives Malaysian farmers the ability to remotely care for their crops and helps to deliver a more sustainable planet for future generations.