SENSOTERRA
we make sense of water

CASE STUDY
PRECISION AGRICULTURE

Water management for Smart Farming & Smart Cities in the Middle East

Scalable data & real-time insights with fully integrated smart IoT systems

Smart Farm Sensing partnered with Sensoterra to integrate soil moisture data for water management in date palm plantations and smart landscaping irrigation across the Mid-East. Laurens Bierens, Managing Director of Smart Farm Sensing, knows the importance of optimizing irrigation for both agricultural and city landscape management in Saudi Arabia, and the Emirates.

The challenge was achieving a scalable data collection. Satellite data, though promising, is still not fully adopted and trusted when making decisions on the ground. Sensors, however, can give real-time precision insights backed by calibrated soil moisture data. It's this simplicity, along with the robust design, long lifetime, and easy installation which makes integrating Sensoterra data, a no brainer.

"Sensoterra is an important player in the entire feedback loop for smart water managmenet, and we are happy to have them on board as a data provider"

HIGHLIGHTS
Abu Dhabi date palm plantation implemented fully automated precision irrigation **saving 600 liters of water per tree** per week

PARTNER
Smart Farm Sensing

DATA INTEGRATOR
Consultancy for Smart City applications & Agriculture

CONNECTIVITY
The Things Network

SENSOTERRA

To learn more visit www.sensoterra.com, or contact us at info@sensoterra.com

Scalable Approach

By combining Sensoterra readings with weather stations, irrigation systems and other sensors, a full-circle approach is achieved, and the AgrIOT app from Smart Farm Systems does just that.

"AgrIOT is a one-stop where our own sensors and Sensoterra, provide aggregated data and made available to users in one-integrated platform."

Getting started is as simple as setting up a LoRaWAN network, connecting sensors, and managing the data with API integration. With low entry barriers, like the low total cost of ownership, easy installation and adoption, the technology is quickly learned by users.

More value with more data

With new sensors coming onto the market, making the right choice can be challenging.

Bierens offers competing soil moisture sensors, however many customers prefer the usability, robustness and durability that Sensoterra provides. Ultimately it is the customers decision, but it's the data that talks.

"Sensoterra is a simple sensor, it's data is reflected by the intuition of the user."

Integrated data

Expanding on their current offering, is integration with irrigation partners like Hydrorock, a subsurface irrigation system provider for fully automated irrigation systems. Sensoterra soil moisture data determines irrigation needs in both agriculture applications and smart city landscaping.

"If a client installs the entire system, including the AgrIOT app, and a couple of sensors, they can start achieving ROI immediately."
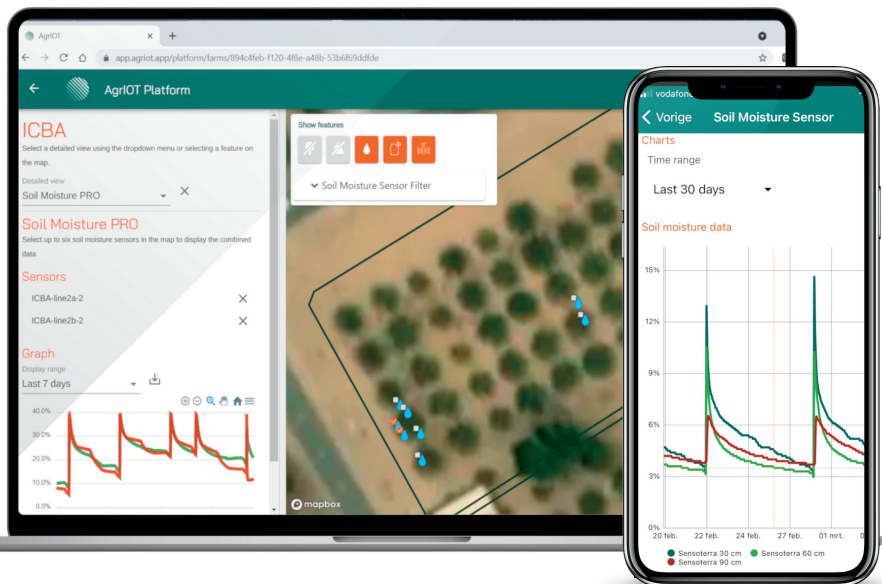
Smart Cities & Municipalities

This is also the case in water management for cities. Local municipalities manage the irrigation of public green spaces closely, with the manual monitoring of sprinkler and surface watering.

By integrating Sensoterra soil moisture data with automated irrigation valves, this reduces the frequency of site visits for manual opening and closing of irrigation valves and pumps.

"Soil moisture thresholds allow for remote control of irrigation valves. When integrated with subsurface irrigation systems, even more value is achieved and water losses minimized."

Keeping parks and public spaces green and beautiful, with more efficient water use.

SMART FARM SENSING

**ABOUT
SMART FARM SENSING**
Smart Farm Sensing provides products, services and solutions to the agriculture sector based on intelligent sensor data, remote sensing and geospatial information.
www.smartfarmsensing.com

ABOUT SENSOTERRA

Sensoterra, established in 2015, with its headquarters in Houten, The Netherlands, develops water management solutions for agriculture & horticulture, smart city management, and water governance. Sensoterra has more than 12,000 sensors in the ground globally, and generates hundreds of thousands of data points for smart water management, daily.

IN PROUD PARTNERSHIP WITH

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