AGRISOURCE DATA SENSORS: DELIVERING REGIONAL VISIBILITY THAT REDUCES COSTS, INCREASES REVENUE, AND IMPROVES WATER USE EFFICIENCY

OVERVIEW

A leading Agri-industry processing company works as an aggregator in a small region on the coastal plains to help modernize agricultural production and stabilize supply among the many independent small-holder farms. They currently deploy a solution over 1,000 hectares that includes devices used to measure soil moisture, well water levels and weather data. Satellite imagery is also analyzed to provide macro-trends in biomass and crop health.

The individual farmers are sent basic recommendations related to irrigation while the aggregator receives information on which farms are using best and worst ag practices as well as individual water usage and recharge rates.

This comprehensive set of data helps the aggregator take less risk in investing in training programs for local farmers and improvements to the logistics chain. Greater insight into the larger trends of crop health provide a better picture of forecasted supply and allow the aggregator to be more reactive, leading to lower costs and higher profitability.

Farmers benefit from increased revenue, the aggregator from higher profitability, the region from better water sustainability, and the nation from greater food security.

TYPICAL RESULTS INCLUDE:

5% savings to bottom line

30% reduction in water usage

Yield increases up to 30%

AGRISOURCE DATA SOLUTIONS IN USE:

• **INTELLIROOT™** - Simple, rugged, and affordable, the IntelliRoot sensor installs in just minutes, with no need for complex wiring or power. Once installed, the sensor transmits soil temperature and moisture data from multiple depths, every two hours, and provides an affordable, easy-to-use way to remotely monitor the subsurface moisture levels that results in prescriptive analysis to inform irrigation decisions before they need to be made, saving water, time, and money.

• **H20TRACK™** - The system uses a high grade industrial quality pressure sensor to provide long term, continuous monitoring of water levels within the well. The system can be used in deep or shallow wells with maximum water levels of 500m. Compact and rugged design makes for easy installation in multiple environments. CE and RoHS certified. Dynamic temperature and automatic barometric compensation result in high accuracy and reliability.

• **WXTRACK™** - Our weather station combines temperature, relative humidity, and rainfall to provide planners with important information related to the total water management cycle. These data points can be used to better understand evaporation, recharge from rainfall, and other key points in the hydrological cycle. The system operates utilizing the 2.4GHz frequency RPMA network available globally and can operate for up to 24 months on battery or upgraded to solar for longer life.

MULTI-LAYER INPUTS FOR COMPREHENSIVE INSIGHT

MULTI-SOURCE DATA

Multi-source data from across major agricultural regions provides insight on Ag management practices that increase yield, revenue, and brand value, improve water efficiency and limit scarcity, and improve wages and profitability.

SENSOR & DATA COLLECTORS

Sensors and Data collectors monitor the full spectrum of agricultural and operational activity, providing real-time alerts, insight into farm-level and national-level trends, and ensure optimal crop production and market delivery.

AGCLARITY™ ANALYTICS PLATFORM

By combining multi-source field-level data, securely stored in the cloud, with advanced artificial intelligence and machine learning, we're able to produce a comprehensive assessment of best and worst Ag management practices across a geographic region.