

# Smart Agriculture

Low-cost Sensors → Data Drones → Vision → Machine Learning

## ■ Smart Agriculture Modelling for IoT Devices

Ensure optimal water supply, minimize economic costs, and promote sustainability for your operations

Water & Waste  
Management

Monitoring Farm Security

Monitoring Soil Moisture &  
Temperature

Crop Production

Remote Management &  
Precision Farming

Predictive Maintenance

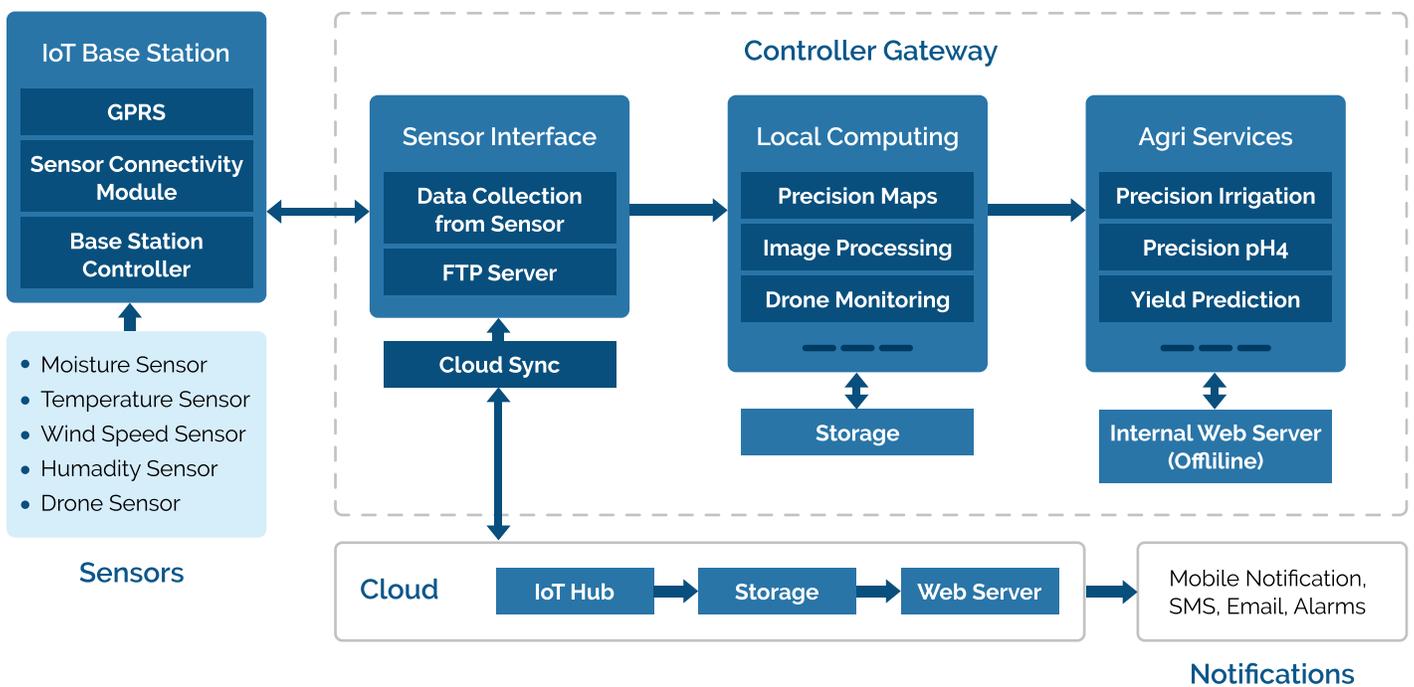
## ■ Our Highlights

- ✓ Demand analysis and effective water utilization
- ✓ Portfolio geography (season, measure, weather, temperature, peak vs off peak hours)
- ✓ Performance measurements
- ✓ Optimization of the plant energy cost
- ✓ Improvement of motor pumps performance through optimization of asset reusability
- ✓ Optimal revenue growth
- ✓ Real-time health monitoring and tracking of assets through advanced & actionable dashboards (Web & mobile)
- ✓ Reduction in capital expenditure + lower maintenance costs
- ✓ Security & surveillance

Irrigation is the most important component of Agriculture, and IoT can bring several benefits for water utilization in the field through smart water irrigation systems. Smart IMS helps you develop a water delivering schedule that ensures all crops have enough water for their healthy growth, reduces the amount of water wasted in irrigation, and minimizes your operation's economic costs.

We offer several unique solutions to solve the problem of the farmer in farm cultivation, soil monitoring, and plant growth with our suite of low-cost sensors, drones, and vision and machine learning algorithms. The sensors analyze the type of crop best suited for farming at different climatic conditions throughout the year, while the other tools identify and analyze the landscape of existing indicators, datasets, and indices to the environmental sustainability of agriculture.

The most relevant thematic areas such as water, climate change, soil health, pollution, land conversion and other important parameters are identified and the relevant data is extracted.



## ■ Why Smart IMS Smart Agriculture

Smart IMS offers Smart Agriculture solutions that are geared towards your:

- ✓ Productivity in Agriculture
- ✓ Prevention of Soil degradation in Cultivable Land
- ✓ Reduction of Chemical Use in Crop Production
- ✓ Efficient Use of Water Resources
- ✓ Dissemination of Modern Farm Practices to Improve Quality, Quantity & Reduced Cost of Production in Agricultural Crops

Goal	Supporting Objectives	Dynamic Impact
<b>Common Platform</b>		Platform is scalable to support future growth (user + business use cases) System allows for modifications in the future, since the business processes are expected to change over time
<b>Reduce Manual Processes</b>	Automate current manual processes	
<b>Best Practice-Driven Implementation</b>	Implement IoT while adopting an accelerated "best practices" approach for business processes, where possible	Minimize customizations Discovery engagement has confirmed good alignment with CLIENT business needs, as well as identifying areas for improvement by changing business process
<b>Minimal Disruption to Business</b>	Replace existing applications in a phased manner to ensure minimal disruption and risk to existing business, as well as balance the internal resources required from CLIENT	Single platform but enables deployment driven by business workloads
<b>Procurement and Inventory Control</b>	Dedicated Procurement team will be responsible for Procurement and deploying the IoT devices at Site	



103 Morgan Lane  
Plainsboro, NJ – 08536



*Atlas Communications Technology*  
*A Smart IMS Company*