

Steps to smart farm Implementation

PHASE 1 Design

What problems are you trying to solve on farm?

- Can it be physically measured?
- Can you manage it, or at least change management practices from it?
- Will it boost productivity or improve efficiency?

What sensors can I use?

- Water Monitoring
- Weather Stations
- Soil Moisture Probes
- GPS Tracking
- Livestock Tracking
- Walk over weigh or in-field scales

PHASE 2 Sensor Choice

PHASE 3 Connectivity Solutions

What Connectivity forms will I need to implement/improve for efficient use?

- Sensor Connection (Sigfox vs LoRaWAN vs Cellular vs Satellite)
- Physical Home/Farm Connectivity (High Speed Internet Access)
- Additional Connectivity (On-Farm WiFi & Building Connectivity)

How will I be able to access this data to make meaningful decisions?

- Supplier Dashboards (GoannaAg, Axistech etc.)
- Aggregated Dashboard where I can show everything on one page (PairTree)
- Decision Support Platforms (Hitachi)

PHASE 4 Data Aggregation & Dashboards

future considerations

Machine Learning & Predictive services

How can I better use this data to improve productivity?

- Nitrogen Prediction
- Yield Prediction
- Weather Forecasting

Blockchain

Can I use this data to create additional income?

- Value adding of agricultural produce
- Creation of greater levels of market access
- "The story of me": food provenance & traceability