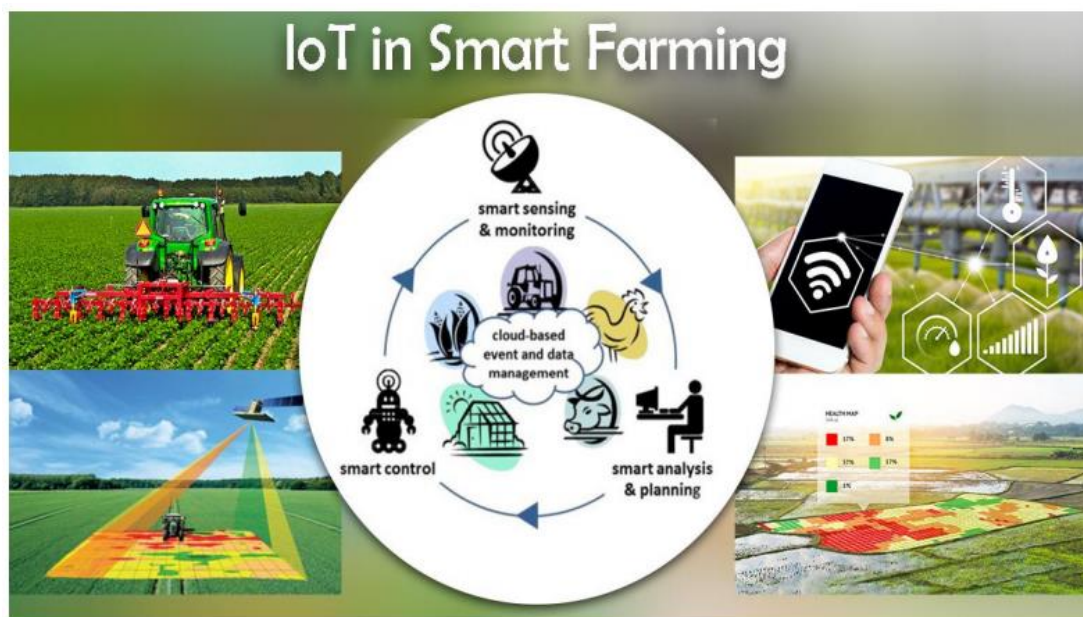


## The IoT in Agri and Food Tech

The Internet of Things refers to smart devices that are capable of transferring information on a network. From disease control measures to cattle and field monitoring systems, IoT is transforming the industry of agriculture by putting the power back where it belongs. Internet of things is making manned machine navigation a thing of the past. Farmers can remotely control their tractors, rotavators, and a host of agricultural machinery with a smartphone. With the Internet of Things technology, farmers could grow high-value crops at scale than hedge their bets with varieties supported by minimum support prices. Another way by which the agriculture is scaling its appetite for the Internet of Things is by installing on-field sensors. By design, sensors are engineered to detect discrepancies in weather conditions, crop nutrition, soil pH, and more.



The food manufacturing industry is high on the deployment of the Industrial Internet of Things (IIoT). The two most suited application areas of IoT that have emerged so far are manufacturing and packaging.

### **The benefits of IoT in the F&B industry are in the following sections:**

1. Warehouse Management - The stock loading times are optimized, managers maintain a magnified vigil on supply chains, due to which the storage space is fully taken advantage of.
2. Vision Picking - Vision picking marries the internet of things with the food industry helping humans identify the right storage zones.
3. Product Authenticity Labels - Internet-enabled microchips vaporate doubts over the authenticity of the product.
4. Smart Sensors - sensors that indicate not just the veracity of quality but whether the sealing has been broken or not, the source of its ingredients
5. Remotely Controlled Storage Units - create handheld smart controllers with which the user could moderate storage environment without physical presence.

### **World- Top 10 world best known Agri Tech companies using IoT**

With the use of AgTech these ten companies are making agriculture smarter than ever using IoT while carrying on a great cultural legacy:

#### **1. Cowlar**

Cowlar monitors the vital signs of cattle and allows for ranchers to adjust the diet and living conditions until the animal is happy.

url: <https://www.cowlar.com/>

CEO - Akshay Mehrotra

## 2. Hortau

A wireless soil and irrigation management platform that integrates with ST field monitors which can connect to irrigation infrastructure to perform tasks such as starting pumps on-demand, based on a schedule, or based on soil conditions.

url: <https://hortau.com/>

CEO - Jocelyn Boudreau

## 3. FieldIn

Combines sensors and efficiency logs to give farm investors and workers actionable insights into the farm's operation.

url: <https://fieldin.com/>

CEO -

## 4. Pycno

Offers wireless, modular soil sensors for use in determining what the soil needs so that farmers can use only the fertilizer and other additives they need in order to reduce waste.

url: <https://pycno.co/>

CEO - Marios Georgiou

## 5. The Yield

Offers a free app that helps users remain aware of the weather conditions (rainfall, evapotranspiration, etc.).

url: <https://www.theyield.com/>

CEO - Milind Mehere

## 6. Agrosmart

Helps farmers monitor more than 10 environmental conditions so that they can make more educated decisions about how to allocate their resources and deal with pests.

url: <https://agrosmart.com/>

CEO - Mariana Vasconcelos

## 7. Grownetics

Assists with the installation of indoor crop monitoring equipment to maximize growing efficiency.

url: <https://abuerdan.com/>

CEO - Eli Duffy

## 8. HerdDogg

A smart eartag producer for keeping up with livestock and their conditions.

url: <https://www.herddogg.com/>

CEO - Louis Faust

## 9. Amber Agriculture

Allows farmers to manage their stored crops to ensure they receive the maximum price per unit for their sales. Amber is a solution for storing crops after harvest when a significant amount of product tends to be lost.

url: <https://www.amber.ag/>

CEO - Lucas Frye

## 10. SciCrop

Focuses the utility of big data and smart farming technology into an actionable dashboard of information. Features are all driven by data in real-time for the best possible performance.

url: <https://scicrop.com/>

CEO - Jose Damico

## India Top 5 Indian Agri Tech Companies using IoT

Top Indian Agritech companies using IoT to make farming profitable are

### 1. Fasal

Helps farmers through its AI-powered IoT-SaaS platform which captures real-time data on growing conditions from on-farm sensors and delivers farm-specific, crop-specific actionable advisories to farmers via mobile in vernacular languages.

url: <https://fasal.co/>

CEO- Ananda Verma

### 2. QZense

Using IoT to build solutions for quick and accurate grading of fresh food, by capturing insights on ripeness, spoilage, and shelf life that assists farmers capture higher margins from the same produce.

url: <https://www.qzense.com/>

CEO- Rubal Chib

### 3. DeHaat

Working 24/7 to support smallholder farmers in Bihar, UP, Odisha, and Jharkhand by offering them a one-stop solution on crops to grow, how to grow and where to sell the produce under one roof in an accessible and affordable way.

url: <https://agrevolution.in/company>

CEO- Shashank Kumar

### 4. Bijak

Helping rural commodity traders and buyers transition to digital commerce, while greenhouse agritech platform

url: <https://www.bijak.in/>

CEO- Mahesh Jakhotia

### 5. Clover

Able to channel a lot of these farmers into its network for serving the end consumer demand in a traceable, hygienic manner.

url: <https://www.clover.com/>

CEO- Avinash B R