

IDEA

IoT smart connectivity uses an esp32 board that connects to the internet, to observe real-time parameters, for eg humidity by using the sensor, we use that sensor in a particular zone. We give all info to the cloud. After data is in the cloud, we can use the data from the sensor to calculate the field condition and indicate the farmer of the condition of the field through the app and website.

Then the farmer uses the information from the app or website to make a decision on whether to turn on the water pump or not. For the extra innovation.

IDEA IN CROP MANAGEMENT

Weather stations should be placed in the field to collect data specific to crop farming; from temperature and precipitation to leaf water potential and overall crop health. you can monitor your crop growth and any anomalies to effectively prevent any diseases or infestations that can harm your yield.

CATTLE MANAGEMENT

There are IoT agriculture sensors that can be attached to the animals on a farm to monitor their health and log performance. Livestock tracking and monitoring help collect data on stock health, well-being, and physical location.

For example, such sensors can identify sick animals so that farmers can separate them from the herd and avoid contamination. Using drones for real-time cattle tracking also helps farmers reduce staffing expenses.

SMART PEST CONTROL

Sensors detect the presence of pests and then dispense pesticides as required to protect crops. This helps reduce pesticide usage and can be used with smart irrigation management for targeted spraying only where it is needed.

SMART WATER CLOTTING CONTROL

whenever water gets clotted between the crops during rainy seasons...here we can set a sensor to detect the water level by setting a threshold level. If the water level is more than the threshold level. Then the sensor notifies us about the level and hence we can use a pump to pull out the water so that the crops do not get spoiled.

SMART WEATHER PREDICTION

For predicting the weather of an area by getting the weather data from the internet and data of the previous year whether data we can combine it together to predict the weather pattern and update the app and website that have been created for the field condition.