## **IoT Based Smart Crop Protection System For Agriculture**

Team details:
Dhanussh Aditya V (Team Leader)
Deepak Rathinam M
Sharanya R G
Kiruthikashree K

## **Abstract:**

Today, innovation has infiltrated all aspects of human existence. However, the commitment of innovation to the field of agribusiness is impressively low when contrasted with different areas, which saw a steady development over the course of the past ten years.

The area of Horticulture contributes the most to the Indian economy and around 1/third of India's populace is straightforwardly reliant upon farming for their type of revenue. Taking into account this, even a little improvement in this area will have a tremendous effect on the Indian economy and on the existence of ranchers. This assists ranchers and customers similarly as it is the buyers eventually, who with getting to appreciate low valued products without weakening in quality.

To accomplish this, we need to beat the obstacles looked by ranchers, which for the most part spin around crop illness, ill-advised upkeep of harvests, absence of insights concerning the nature of soil and mediation of animals and birds. To conquer this, in this task we propose 'A shrewd harvest security framework', the primary target of which is to work on the return and increment the benefit for ranchers. An insightful yield security framework utilizes

information from moisture,motion,temperature,humidity sensors and updates the information in realtime in IBM cross stage IOT cloud interface. The engines and the sprinkling framework are initiated in view of the information from the sensors. Additionally when the movement sensor distinguishes movement, the rancher is advised with that through the portable application. This assists the ranchers in shielding the

harvest from the animals and birds while obliterating the yield. And furthermore back off the upkeep cycle. The authentic information from sensors are put away in cloud, so this can likewise be utilized for soil assessment and this additionally assists with arranging, which kind of harvests are to be established in the impending seasons so the yield is high.

The equipment and the product required:

Temperature sensor, Stickiness sensor, Dampness sensor, Motors , Sprinklers and IBM CLOUDANT AND WATSON IOT Stage is additionally utilized.

IBM cloudant is a cloud based data set administration framework which can be utilized as a dispersed data set administration framework, this can be utilized to store the information from the sensors in clou and can be utilized for calculation from anyplace on the planet.