

# **IBM PROJECT**

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### **ABSTRACT:**

A centralizing method in the area of IoT (Internet of Things) contrived for understanding agriculture which is preceding the arrangements low-power devices. This paper yields a monitoring procedure for farm safety against animal attacks and climate change conditions. IoT advances are frequently used in smart farming to emphasize the standard of agriculture. It contains types of sensors, controllers. On behalf of WSN, the ARM Cortex-A board which consumes 3W is the foremost essence of the procedure. Different sensors like DHT 11 Humidity & Temperature Sensor, PIR Sensor, LDR sensor, HC-SR04 Ultrasonic Sensor, and camera are mounted on the ARM Cortex-A board. The PIR goes high on noticing the movement within the scope, the camera starts to record, and the data will be reserved onboard and in the IoT cloud, instantaneously information will be generated automatically towards the recorded quantity using a SIM900A unit to notify about the interference with the information of the weather conditions attained by DHT11. If a variance happens, the announcement of the threshold rate will be sent to the cell number or to the website. The result will be generated on a catalog of the mobile of the person to take the necessary action.

### **LITERATURE SURVEY**

#### **IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE**

Ipseeta Nanda,Sahithi Chadalavada,Medepalli Swathi , Lizina Khatua  
“Implementation of IIoT based smart crop protection and irrigation system”, 240<sup>th</sup> ECS (The Electrochemical Society) meeting ,2021.

IOT tendencies are often utilized in smart farming to boost the standard of agriculture. Farming the pillar of supports our country to the general commercial development. But our productivity is extremely low as associated to world standards . People from rural areas drift to an urban area for other worthwhile trades and they can't concentrate on agriculture . There are many disadvantages of the current traditional agricultural methods namely costlier and manual monitoring of the agriculture field . Specifically, small-scale smart irrigation systems are

utilized to provide the solution for dissimilar variety of plants in spite of getting the solution for moisture related issues Weather conditions like temperature, humidity and moisture are difficult to check manually frequently . Farmer suicide is turning into big problem due to low productiveness amongst farms This low productiveness is due to the fact of two main reasons, Crop ruined by means of untamed weather conditions untamed animal attacks, small types of species, insects, some hazardous snakes and weather circumstances. Within the existing system, electrical fencing is used to give up untamed animal assaults on agricultural vegetation which leads to the death of animals. The fundamental objective is to provide a fantastic answer to this problem, so that losses incurred will be minimized and farmers will have an accurate crop yield . This low productivity is because of the fact of two most important motives i.e. Crop destroyed via untamed animals and Crop damaged by using nature object . The main objective of this assignment is to furnish a fantastic answer to this trouble, as a result with the purpose of the economic losses incurred through the support of our farmers are minimized to get truthful crop yield . This ensures complete security of vegetation from animals and defending the farmers loss.

### **LIMITATIONS:**

1. There could be a wrong analysis of weather conditions.
2. Devices are to be altered according to the farmers, it will involve equipment which will be expensive.
3. If there are faulty data processing equipment or sensors, then it will lead to a situation where the decision are taken wrong.