

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

IOT Based Crop Protection System against Birds and Wild Animal Attacks  
Smart crop protection system from wild animals using Arduino  
Smart Crop Protection System from Animals and Fire using Arduino

### **Abstract :**

This defines that this project help to farmer for the protection of a farm. Using conventional methods, the requirement can't be satisfied. It can be achieved only by using the use of modern technologies. To increase quality as well a quantity of agricultural products. This is done. By the help of IoT device. We have designed this project for the only secure. From the animals but this project have the provision to secure from the human beings also. The work on the battery so that can be easily portable & this project also we add solar panels & converter modules. This can help the battery to charge. From solar energy. The IoT device issued to indicate the farmer by message while someone enter into we are used SD card module that helps to store a specified sound to scare the animals. Self control protectors which provide. Secondary protection for lithium ion batteries

## **SMART CROP PROTECTION SYSTEM FROM ANIMALS AND FIRE ARDUINO**

Crops in farms are many times ravaged by local animals like buffaloes, cows, goats, birds, and fire etc. This leads to huge losses for the farmers. It is not possible for farmers to barricade entire fields or stay on field 24 hours and guard it. So here we propose automatic crop protection system from animals and fire. This is an Arduino Uno based system using microcontroller. This system uses a motion sensor to detect wild animals approaching near the field and smoke sensor to detect the fire. In such a case the sensor signals the microcontroller to take action. The microcontroller now sounds an alarm to warn the animals away from the field as well as sends SMS to the farmer and makes call, so that farmer may know about the issue and come to the spot in case the animals don't turn away by the alarm. If there is a smoke, it immediately turns ON the motor. This ensures complete safety of crops from animals and from fire thus protecting the farmer's loss. This is an Arduino Uno based system using microcontroller. This system uses a motion sensor to detect wild animals approaching near the field and smoke sensor to detect the fire. In such a case the sensor signals the microcontroller to take action.

## **SMART CROP PROTECTION SYSTEM FROM LIVING OBJECTS AND FIRE USING**

So here we propose automatic crop protection system from animals and fire. This is an Arduino Uno based system using microcontroller. This system uses a motion sensor to detect wild animals approaching near the field and smoke

sensor to detect the fire. components and they need vegetable safety from wild animals . The aim of crop matters. Then we in the proposed system we are using arduino and various.

### **SMART CROP PROTECTION AGAINST ANIMALS ATTACK**

This system helps us to keep away such wild animals from the farm land and it is also an automated Use GSM module for alerting the owner of the crop.

### **SMART IRRIGATION AND CROP PROTECTION FROM WILD ANIMALS**

system which assists the farmer in the irrigation process. we use IR sensors to detect wild animals, soil moisture are connected to Arduino microcontrollers input.

### **ANIMAL DETECTION SYSTEM IN FARM AREAS IJARCCE**

Animal detection system is designed to detect the presence of animal and offer a warning. In this project we used PIR and ultrasonic sensors to detect the movement of the animal and send signal to the controller. It diverts the animal on crops and prevent wild animals . Since safety of both Smart Passive Infrared Sensor.

Crop Protection by an alert Based System using Deep Learning Concept boundaries are prominently affected by the wild animal generating devices, and arduino module. For a smart earlier detection and protection system with the help.

2 to keep an eye fixed on the crops and forestall the wild animals. using Arduino Uno. Smart Block diagram for smart crop protection system.

### **DEVELOPMENT OF CROP SECURITY MODEL FOR ENCHANCEMENT**

protection system model is developed for the farmers to prevent the crops The problem of wild animal attacks on crop fields i.e. crop vandalization is becoming a integrating them using Arduino a better approach in making the system automated. in the field of Internet of Things for smart Agriculture based on low power