

# **IBM PROJECT**

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

## **ABSTRACT :-**

This paper describes overview of various researches on smart crop protection system. We have a lot of technology that can protect the farm 24x7 those systems and technique we are discussing in this paper. We have different types of technology that can help to secure the farm. We have seen Arduino and Raspberry Pi based Farm protection system. But those systems have different methodology and platform for that and the cost of those projects also increased so that those are not affordable with the farmer. Our main aim is to design a system that can help the farmer to protect his farm from animals with getting harm to them.

## **Literature Survey:-**

### **Smart Crop protection system from living objects and fire using Arduino**

Dr.M. Chandra ,Mohan Reddy,

KeerthiRajuKamakshiKodi,

BabithaAnapalliMounikaPulla, "SMART CROP PROTECTION SYSTEM FROM LIVING OBJECTS AND FIRE USING ARDUINO", Science, Technology and Development, Volume IX Issue IOT BASED SMART CROP PROTECTION SYSTEM FROM LIVING OBJECTS AND FIRE USING ARDUINO", Science, Technology and Development, Volume IX Issue IX ,pg.no261-265,Sept 2020.

This paper motive to designing and executing the superior improvement in embedded device for Crops in farms are over and over ravaged with the aid of nearby animals like buffaloes,cows,goats,birds,and fireplace etc. This results in huge losses for the farmers. It is now not feasible for farmers to barricade

complete fields or precede field 24 hours and protect it. Therefore here we present computerized crop safety system from animals and fire. This is a Arduino Uno primarily based device the use of microcontroller. This technique makes use of a motion sensor to discover wild animals drawing near the sphere and smoke sensor to discover the hearth. In such a case the sensor alerts the microcontroller to require reaction. The microcontroller now sounds an alarm to woo the animals away from the sector further as sends SMS to the farmer and makes call, in order that farmer may fathom the difficulty and come to the spot just in case the animals don't recede by the alarm. If there's a smoke, it immediately turns ON the motor. This provide us entire safety of plants from animals and from fireplace for this reason protecting the farmer's loss.

By smart Agriculture monitoring system and one of the oldest ways in agriculture is the manual method of checking the parameters. In this method farmers by themselves verify all the parameter and calculate the reading .The system focuses on developing devices and tool to manage, display and alert the users using the advantages of a wireless sensor network system. It aims at making agriculture smart using automation and IoT technologies . The cloud computing devices are used at the end of the system that can create a whole computing system from sensors to tools that observe data from agriculture field. It proposes a novel methodology for smart farming by including a smart sensing system and smart irrigator system through wireless communication technology . This system is cheap at cost for installation. Here one can access and also control the agriculture system in laptop, cell phone or a computer.

## **LIMITATIONS :-**

1. There could be a wrong analysis of weather conditions.
2. If there are faulty data processing equipment or sensors, then it will lead to a situation where the decisions are taken wrong.