IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

LITERATURE SURVEY

TITLE	**IOT Based Smart Crop Protection System for Agriculture**
DOMAIN NAME	**INTERNET OF THINGS**
LEADER NAME	**SUBASH T**
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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 mythology and platform for that and the cost of those projects also increased so that those are not affordable with the farmer. Our main aim to design a system that can help to farmer to protect his farm from, animals with getting harm to them.

Keywords:SCPS, IOT, Arduino,Nodemcu.

INTRODUCTION

Different strategies point just at observation which is fundamentally for human gatecrashers, however we will in general fail to remember that the fundamental foes of such farmer are the animals which literate the harvests. The issue of natural life assault on cropsi.e., crop Canalization is getting extremely normal in the conditions of Tamil Nadu, Himachal Pradesh, Punjab, Haryana,Kerala and numerous different states. Wild creatures like monkeys, elephants, wild pigs, deer, wild canines, buffalo, nilgais,estray creatures like cows and wild oxen and even feathered creatures like parakeets cause a great deal of harm to crops by running over them eating and totally vandalizing them. This prompts helpless yield of harvests and huge monetary misfortune to the proprietors of the farmland.

Smart Crop protection system from living objects and fire using Arduino

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 aArduino 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 action. 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.

ADVANTAGES

- Reduce waste,improve productivity and enable management of a greater number of resources through remote sensing.

DISADVANTAGES

- It requires an unlimited or continuous internet connection to be successful

IOT based smart crop monitoring in farm land

As new technologies has been introduced and utilized in modern world, there is a need to bring advancement in the sector of agriculture also. Various Researches have been undergone to enhance crop cultivation and are widely used. So as to enhance the crop productivity efficiently, it is necessary to monitor the environmental conditions in and around the field. The parameters that has to be exact monitored to enhance the yield are soil characteristics, weather conditions, moisture, temperature, etc., Internet of Things (IOT) is being utilized in a number of real time applications. The introduction of Internet of thing (IOT) along with the sensor network in framrefurbishes the traditional way of farming.

ADVANTAGES

- The system offers little control despite any security measures,and it can be lead the various kinds of network attacks.

DISADVANTAGES

- Initial cost is high

Automatic Irrigation and Crop Protection System Based on IoT

Proposal of an automatic irrigation, and it maintains the moisture content present in the soil by automatic irrigation system. Monitoring soil properties such as temperature, humidity, soil moisture, and motor status. The crop protection system is used to control the outbreak of the animals that enter the field. Capacitive soil moisture sensor v1.2, and DHT11 sensor is used to measure the exact amount of soil moisture, humidity, temperature, motor status. An alarm

voice system is used to run the animals detected using motion detection sensor controlled by Node MCU.

ADVANTAGES

- Sava the water source for only using the crops

DISADVANTAGES

- Sensor did not work properly all the time.

CONCLUSIONS

From this literature survey we have seen lots of technology that help to farmer for to protect his farm. Specially IOT based system who can monitor the farm online. In above research papers they are not looking cost of System and so that didn't get affordable to every farmer. Hence we want implement a costless smart crop protection system.

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