IDEATION PHASE
LITERATURE SURVEY

TEAM ID	**PNT2022TMID32996**
PROJECT DOMAIN	**IoT**
PROJECT TITLE	**IoT Based Smart Crop Protection For Agriculture**
DATE	**19 September 2022**

ABSTRACT

The Smart protection system defines that this project help to farmer for the protection of a farm. We have designed this project for the only secure from animals but we this project have the provision to secure from the human begins also. This can achieve by the help of IOT device that we are discuss in this paper. The SCPS work on the battery so that this project can be easily portable and also we are add solar panels and converter modules this can help the battery to
charge from solar energy. The IOT device is used to indicate the farmer by a message while someone enter into the farm and we are used SD card module that helps to store a specified sound to fear the animals.This project is smart crop protection system for protect the farm from animals as well as unknown person. This projects contents arduino UNO, Nodemcu, LCD display, PIR sensor, flame sensor ,sd card module ,solar panel, solar charges converter. This whole project is work on 12v dc supply from battery. We used solar panel to charge the battery

Iot based smart agriculture monitoring system.

Rajalakshmi.P and S. Devi Mahalakshmi, “IOT Based Crop Field Monitoring and Irrigation Automation”, 10th International conference on Intelligent systems and control (ISCO), 2016.

An IOT Based Crop-field monitoring an irrigation automation system describes how to monitor a crop field. A system is developed by using sensors and according to the decision from a server based on sensed data, the irrigation system is automated.

Through wireless transmission the sensed data is forwarded to web server database. If the irrigation is automated then the moisture and temperature fields are decreased below the potential range. The user can monitor and control the system remotely with the help of application which provides a web interface to user .

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 and computer.

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 decisions are taken wrong.

LITERATURE SURVEY:

In [1], the author clearly explains about how one of the primary issues facing farmers in our nation is low crop output. There are two basic causes for this. crops damaged because of severe weather and wild animals. This essay offers a remedy for agricultural destruction caused by animals. This system will give farmers a full technological answer using the Internet of Things (IOT) to protect their crops from wild animals and give them information to increase their output. PIR sensors and cameras are used to detect animals, and TensorFlow image processing techniques are used to identify the detected animals. The system's processing component is a Raspberry PI, and sound buzzers are utilised to transmit the ultrasound frequencies.

In [2], we understand that in, day to day lives are heavily reliant on technology. The need for Internet of Things (IoT) has increased significantly across many industries, which has attracted significant research interest from both the academic community and the business community. IoT adoption has facilitated smart farming and precision agriculture, to name a few, solely in the agriculture industry. To stop animals from entering the crop field, this paper describes the development of an Internet of Things application for crop protection. To guard against potential harm to agriculture from wild animal attacks and meteorological conditions, a repelling and monitoring system is offered.

References:

1. N. S. Gogul Dev, K. S. Sreenesh and P. K. Binu, "IoT Based Automated Crop Protection System," 2019 2nd International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT), 2019, pp. 1333-1337, doi: 10.1109/ICICICT46008.2019.8993406.

2. S. Giordano, I. Seitanidis, M. Ojo, D. Adami and F. Vignoli, "IoT solutions for crop protection against wild animal attacks," 2018 IEEE International Conference on Environmental Engineering (EE), 2018, pp. 1-5, doi: 10.1109/EE1.2018.8385275