**Literature survey**

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

**ABSTRACT**

India is agriculture sector, on either side, is losing ground every day, affecting the ecosystem\'s output capacity. In order to restore vitality and put agriculture back on a path of higher growth, there is a growing need to resolve the issue. A large-scale agricultural system necessitates a great deal of upkeep, knowledge, and oversight. The IoT is a network of interconnected devices that can transmit and receive data over the internet and carry out tasks without human involvement. Agriculture provides a wealth of data analysis parameters, resulting in increased crop yields. The use of IoT devices in smart farming aids in the modernization of information and communication. For better crop growth moisture, mineral, light and other factors can be assumed. This research looks into a few of these characteristics for data analysis with the goal of assisting users in making better agricultural decisions using IoT. The technique is intended to help farmers increase their agricultural output.

Literature Survey:-

# IOT based smart crop monitoring system.

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 theirrigation is automated then the moisture and temperature fields are decreased below the potential range. The user canmonitor 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 or a computer.

**Conclusion:**

Conclude The proposed work provides the information on various soil parameters that includes soil temperature, soil moisture and atmospheric temperature to predict irrigation suitability. This system helps to analyze the soil parameters thereby ensuring a better system of irrigation for agriculture. The data collected from the sensors are made to learn using machine learning techniques to ensure a fully automated sys- tem. Implementing an IoT based smart agriculture system helps in obtaining quality crops and it also reduces the human involvement in agricultural activities.

# 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 .