**LITERATURE SURVEY**

**Team ID:** PNT2022TMID20252

**Team Title:** IOT Based Smart Crop Protection System for Agriculture

**College Name:** Sri Krishna College of Technology

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| **S.No** | **ID NUMBER** | **POSITION** | **NAME** |
| 1. | 727819TUEC230 | Team Leader | Sneha P |
| 2. | 727819TUEC231 | Team Member | Sobiha Devi U |
| 3. | 727819TUEC253 | Team Member | Vishnu Ram M |
| 4. | 727820TUEC803 | Team Member | Vinesh Kumar K |

**PAPER TITLE:**

Implementation of IoT based smart crop protection and irrigation system.

**AUTHORS:**

Ipseeta Nanda , Sahithi Chadalavada , Medepalli Swathi , Lizina Khatua.

**ABSTRACT:**

A centralizing method in the area of IoT (Industrial Internet of Things) contrived for understanding agriculture which is preceding the arrangements low-power devices. This paper yields a monitoring procedure for farm safety against animal attacks and climate change conditions. IoT advances are frequently used in smart farming to emphasize the standard of agriculture. It contains types of sensors, controllers. On behalf of WSN, the ARM Cortex-A board which consumes 3W is the foremost essence of the procedure. Different sensors like DHT 11 Humidity & Temperature Sensor, PIR Sensor, LDR sensor, HC-SR04 Ultrasonic Sensor, and camera are mounted on the ARM Cortex-A board. The PIR goes high on noticing the movement within the scope, the camera starts to record, and the data will be reserved onboard and in the IoT cloud, instantaneously information will be generated automatically towards the recorded quantity using a SIM900A unit to notify about the interference with the information of the weather conditions attained by DHt11. If a variance happens, the announcement of the threshold rate will be sent to the cell number or to the website. The result will be generated on a catalogue of the mobile of the person to take the necessary action

**PAPER TITLE:**

IOT Based Smart Agriculture System

**AUTHORS:**

Durgesh Raghuvanshi , Apurva Roy , Dr.Vaibhav Panwar

**ABSTRACT:**

Smart Agriculture system is an aborning topic in this materialistic world. This paper describes the concept of featuring and elasting an agriculture platform to the internet world. Agriculture is the most important of human life so it can be improvised by using IoT technology. IoT technology gives a grasp to enhance the power of automation systems in agriculture. Smart agriculture System that uses the advantages of cutting-edge technologies such as Arduino and Wireless Sensor Network. This paper proposes the concept and features of the sensor world in the internet of things for agriculture which is used to enhance the production of crops. The Agriculture stick being proposed through this paper is integrating with Arduino Technology, Breadboard and mixed with different various sensors and live data feed can be obtained online through mobile phone. India Monitoring environmental conditions are the major factor to improve the yield of efficient crops. The feature of this paper includes the development of a system that can monitor temperature, humidity, moisture, and even the movement of animals which may destroy the crops in agricultural fields through sensors using Arduino board. With its energy autonomy and low cost, the system has the potential to be useful in water-limited geographically isolated areas.

**ADVANTAGES:**

* Efficiency, Expansion, Reduced resources.
* Clean process, Agility, Improved product quality.

**PAPER TITLE:**

Smart Crop Protection System

**AUTHORS:**

Mohit Korche , Sarthak Tokse , Shubham Shirbhate , Vaibhav Thakre , S.P.Jolhe

**ABSTRACT**:

Agriculture is the backbone of the economy but because of animal interference in agricultural lands, there will be huge loss of crops. This article provides a comprehensive review of various methods adopted by farmers to protect their crops. The article also discusses use of modern technology in agriculture. Finally, this article reviews smart crop protection system using sensors, microcontroller and gsm module.

**ADVANTAGES:**

* The problem of crop vandalization by wild animals and fire has become a major social problem in current time.
* It requires urgent attention as no effective solution exists till date for this problem.
* Thus,this project carries a great social relevance as it aims to address this problem. This project will help farmers in protecting their orchards and fields and save them from significant financial losses and will save them from the unproductive efforts that they endure for the protection their fields.

**PAPER TITLE:**

IOT in Agricultural Crop Protection and Power Generation

**AUTHORS:**

Anjana M , Charan Kumar A , Monisha R , Sahana R H , Sowmya M S

**ABSTRACT:**

Agriculture is the science and art of growing plants. Agriculture plays predominant position in the financial improvement of our country and this is the primary profession from many years. To extend the efficiency of the yields and to limit the costs of rural practices we go for smart techniques of agriculture by using IOT technology. Protection of crop during rainy season is major challenge for farmers. By incorporating Greenhouse technology, an environment condition for a crop to grown will created along the various features like sensor based totally monitoring, security, crop safety from excessive rain and automatic roof overlaying facility. Greenhouse is operated in two modes i.e, automatic mode and manual mode. It makes use of telegram app for communicating with the cultivators about various environmental factors continuously. Various sensor nodes are deployed at special locations in the greenhouse. Controlling those parameters are through any remote device or internet services and the operations are completed by means of interfacing sensors, with microcontroller.