## LITERATURE SURVEY:

Internet of things (IoT) is a promising technology which provides efficient and reliable solutions towards the modernization of several domains. To improve the agricultural yield with fewer resources and labor efforts, substantial innovations have been made throughout human history. Nevertheless, the high population rate never let the demand and supply match during all these times. The author one describes Internet of Things (IoT) technology has brought revolution to each and every field of the common man's life by making everything smart and intelligent. IoT refers to a network of things which make a self configuring network. The development of Intelligent Smart Farming IoT based devices is day by day turning the face of agriculture production by not only enhancing it but also making it cost-effective and reducing wastage. Theme/objective of this report is to propose an IoT based Smart Farming System assisting farmers in getting Live Data (Temperature, Soil Moisture) for efficient environment monitoring which will enable them to increase their overall yield and quality of products. The IoT based Smart Farming System being proposed via this report is integrated with Arduino Technology mixed with different Sensors and a Wi-fi module producing live data feed that can be obtained online from Things speak.com. The product being proposed is tested on Live Agriculture Fields giving high accuracy over 98% in data feeds.

IoT based solutions are being developed to automatically maintain and monitor agricultural farms with minimal human involvement. The author two describes Farming is the backbone of the economy and it is the fundamental method for occupation. The large population of the world depends on farming for living day to day life. Around 70% of the Indian population depends on cultivation. Most of the cultivation cannot be productive only by physical activities so have to be handled by innovative technologies. Therefore, they use IoT innovation and SMS notification to address the critical part of farming. This undertaking is a follow up to a past method whose highlight features incorporates which regulates temperature, moisture and soil dampness of a particular crop. Controlling of every one of these activities will be monitored by PC with Internet and the tasks being performed by interfacing sensors and Arduino. With the observation results decisions are to be made.

The author three describes the design and the experiment of a smart farming system based on an intelligent platform which enables prediction capabilities using artificial intelligence (AI) techniques. The increasing global population demands improved production to provide food in all sectors, especially in agriculture. Still, at certain periods, demand and supply will not match. Managing and sustaining capital and manpower is still a demanding challenge for improving agricultural production. Smart agriculture is a better option for growing food production, resource management, and labor. This research provides an overview of predictive analysis, Internet of Things (IoT) devices with cloud management and security units for multi-culture in the agriculture sector with considering farmer's prior experiences and also highlights the challenges and complications expected while integrating modern technology in the traditional farming practice experience Besides drone activation from IoT encounters crop status and stages, irrigation, plant leaves, diseases in the green field. The sensors that are activated for various purposes in IoT are discussed. Modern agriculture with state-of-the-art IoT devices and concepts is the main objective of this research.

## **REFERENCES**

- [1] Suma, V.(2021). Internet-of-Things(IoT) based Smart Agriculture in India-An Overview. *Journal of ISMAC*, 3(01), 1-15.
- [2] Dahane, A., Benameur, R., Kechar, B., & Benyamina, A. (2020, October). An IoTbas ed smart farming system using machine learning. In 2020 International Symposium on Networks, Computers and Communications (ISNCC) (pp. 1-6). IEEE.
- [3] Farooq,M.S.,Riaz,S.,Abid,A.,Abid,K.,&Naeem,M.A.(2019).ASurveyontheRol eof IoT in Agriculture for the Implementation of Smart Farming. *IEEE Access*, 7, 156237-156271.