LITERATURE SURVEY

1. **Smart Farming using IoT, a solution for optimally monitoring farming conditions**

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Internet of Things (IoT) is present and future of every field impacting everyone’s life by making everything intelligent. It is a network of different devices which make a self-configuring network. The new developments of Smart Farming with use of IoT, by day turning the face of conventional agriculture methods by making it optimal and cost-efficient for farmers and reducing crop wastage. The aim is to propose a technology which can generate messages on different platforms to notify farmers. The product will assist farmers by getting live data (Temperature, humidity, soil moisture, UV index, IR) from the farmland to take necessary steps to do smart farming by increasing their crop yields and saving resources (water, fertilizers). The product proposed in this paper uses ESP32s Node MCU, breadboard, DHT11 Temperature and Humidity Sensor, Soil Moisture Sensor, SI1145 Digital UV Index / IR / Visible Light Sensor, Jumper wires, LEDs and live data feed can be monitored on serial monitor and Blynk mobile. This will allow farmer to manage their crop with new age in farming.

**2.Future of Smart Farming with Internet of Things Ravi Gorli Assistant Professor Department of Computer Science & Engineering, GIT, GITAM**

Farming is an occupation playing the ultimate role for this world's survival. It supplies maximum needs for the human being to live in this world. But in the advancement of the technologies with invention of Internet of Things, the Automation (Smarter technologies) is replacing the traditional methodologies which in cause resulting in wide range improvement of the Fields. Now we are in the state of automation where the up gradation of smarter technologies are improving day by day in maximum sectors starting from smart homes, garbage, vehicles, industries, Farming, health, grids and so on. In the field of Farming, the improvement with the implementation of Automation is also taking place with the invention of Internet of Things. The main idea of this paper is focused on the review of the improvement in the Smart Farming sector

**3.IoT Based Agriculture Monitoring and Smart Irrigation System Using Raspberry Pi Mrs.T.Vineela1, J. NagaHarini2, Ch.Kiranmai3, G.Harshitha4, B.AdiLakshmi5 Assistant Professor, Dept. of ECE, VVIT, ANDHRA PRADESH, INDIA 2,3,4,5 Student, Dept. of ECE, VVIT, ANDHRA PRADESH, INDIA**

IOT is a shared Network of objects where these objects interact through the Internet. One of the important applications of IoT is Smart Agriculture. Smart Agriculture reduces wastage of water, and fertilizers and increases crop yield. Here a system is proposed to monitor crop-field using sensors for soil moisture, humidity, and temperature. By monitoring these parameters the irrigation system can be automated if soil moisture is low. The new scenario of decreasing water, drying up of rivers and tanks, and an unpredictable environment, presents an urgent need for proper utilization of water. To cope up with this use of temperature and moisture, sensors are placed at suitable locations for monitoring the crops. After research in the agricultural field, researchers found that the yield of agriculture is decreasing day by day. However, the use of technology in the field of agriculture plays an important role in increasing productivity as well as in reducing manpower. Some of the research attempts are done for the betterment of farmers that provide systems that use technologies helpful for increasing the agricultural yield. Cloud computing devices create a whole computing system from sensors to tools that observe data from the agricultural field and accurately feed the data into the repositories. This idea proposes a novel methodology for smart farming by linking a smart sensing system and a smart irrigation system through wireless communication technology. It proposes a low-cost and efficient wireless sensor network technique to acquire the soil moisture, Humidity, and temperature from various locations of the field, and as per the need of the crop water motor is enabled.It proposes an idea about how an automated irrigation system was developed to optimize water use for agricultural purposes