**LITERATURE SURVEY**

Abstract

One of the important applications of Internet of Things is Smart agriculture. Smart agriculture reduces wastage of water, fertilizers and increases the crop yield. In the current agriculture system the specification such as temperature, moisture, humidity are detected manually which increases the labor cost, time and also monitoring cannot be done continuously. In this paper irrigation process is done automatically using different sensors which reduces the manual labour. Here a system is proposed to monitor crop-field using sensors for soil moisture, humidity and temperature. By monitoring all these parameters the irrigation can be automated.

Smart Agriculture Using IOT

IoT technology helps in collecting information about conditions like weather, moisture, temperature and fertility of soil, Crop online monitoring. IOT allows farmers to get connected to his farm from anywhere at anytime. Wireless sensor networks are used for monitoring the farm conditions and micro controllers are used to control and automate the farm processes. Wireless cameras have been used to view remotely the condition of the form. A smart phone empowers farmer to keep updated with the ongoing conditions in any part of the world.

Smart Irrigation Software

Smart irrigation software combines the latest technology with crop-specific management processes and integrated sensors to provide farmers and agriculture researchers real-time data about moisture, weather predictions, and evaporation predictions for making better farming decisions. With features such as fertilizer, water, moisture, and equipment management, climate alerts, soil sensing, landscape recommendations, and many more, smart irrigation systems provide farmers full control of the irrigation process.  Good Firms has researched the leading smart irrigation software that can assist you in analyzing, managing, and optimizing your irrigation processes to achieve the highest possible field productivity.

Internet of Things (IoT) Enabled Water Monitoring System

Water is always a needy part of everyone’s life. Due to environmental situation, water management and conservation will play a vital for human survivals. Recently , there were huge needs for consumer based humanitarian projects that could be rapidly developed using Internet of Things (IoT). This proposes an IoTbased water monitoring system that measures water level in real-time . The prototypes are based on the level of the water can be an important parameter when it comes to the flood especially in disaster areas. A water level sensor is used to detect the water level and based on the fixed parameter, and if the water level reaches the parameter, the alert signal will be feed in real- time to social network like Twitter. A cloud server was configured as data repository. The ultra-sonic sensor could be replaced by precise water level sensor. So that the system can perform more efficiently and gives higher accuracy of water level detection instance.

Smart Water Management Using IOT

This project helps us to manage the water level and where we can use in the Society easily. The level of water is maintained by sensor which is presented inside the tank and the data will stored in the cloud using mobile application. Users can view the level of water thorough mobile phones; according to that motor will be work automatic and manual. If the water level is low automatically motor gets switched on if it’s up to fill then it will shut down the motor[1]. In our proposed system, Using Mobile phones we can monitor the water level and we can control from anywhere and anytime. It can also used in different industries to maintain the different type of liquids in the tank they can view and maintain the update information through the mobile application. User can also get alert notification according to their fixed criteria. It can also be implemented for flood propane like install this facility in Dams and bank of rivers etc

IOT based monitoring system in Smart Agriculture

Even now different developing countries using the traditional ways and backward techniques in agriculture sector. A little technological advancement has increased the production efficiency significantly. And to increase the productivity the inventive approach is introduced. Smart farming with Internet of Things (IOT) has been designed. By developing a motor vehicle which can be operated on both automatic and manual modes which can be used for various agriculture activities like cutting, spraying, and weeding etc. The controller will monitor the temperature, humidity, soil fertility, and water management to the field. By using green energy and smart technology the agriculture sector will find a better way to increase the productivity [22].