LITERATURE SURVEY

INTRODUCTION

Most important factors for the quality and productivity of plant growth are temperature, humidity and light. Continuous monitoring of these environmental variables provides valuable information to the grower to better understand, how each factor affects growth and how to maximize crop productiveness . 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 labor. 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.

PROPOSED METHOD

As traditional farming are more labour intensive,Risky and resulting to suicidal due low yield or Act of God.Small farmers unaware of the smart agriculture system big fishes and corporate community are enjoying the advantages of smart agriculturetechnology. Thanks to Pandemic Covid-19 which returned the migrants back to their respective villages and having no source of income are happily willingto come back to their origina lgriculture farming as their occupation. At this time when the Smart Irrigation System is an IoT based device which is capable of automating the irrigation process by analyzing the moisture of soil and the climate condition (like raining) can be incorporated by small players in farming and enjoy high yield profit earning. IOT advancement helps in agrarian societal information on conditions like atmosphere, temperature and productivity of soil, harvest web watching engages area of weed, level of water, bug acknowledgment, animal interference in to the field, alter improvement, cultivation.

CONCLUSION

This concept can be implemented in a real greenhouse for growing good agricultural produce which can be of export quality. The system will take care of automatic irrigation control and various parameters of the greenhouse can be monitored like Temperature, Humidity and Soil Moisture. The Android Application form the user interface and to record the parameter details we use an application server module. This recorded data can be used for analysis and help in taking decisions. The main advantage of this paper is that, all the functions to be performed by the Fan and Sprinkler to control the climatic conditions like temperature, relative humidity and soil moisture levels in the Greenhouse

environment are all automated and it does not require any human intervention. This is particularly an important factor because the presence and availability of the human cannot always be trusted on. For important structures like the greenhouses, we need a more dependable and reliable way for its management which is easily achieved by this project. Greenhouses are very important as they are responsible for the efficient growth of crops that are either necessary to feed the population or necessary for the economic growth of any country.

FUTURE SCOPE

Future work would be focused more on increasing sensors on this stick to fetch more data especially with regard to Pest Control and by also integrating GPS module in this IoT Stick to enhance this Agriculture IoT Technology to fullfledged Agriculture Precision ready product.

- Implementation of Foggers

- Implementation of sliders.

- Implementation of roof sheets.

- Implementation of controllable water motor.

- Detection of gases/minerals above/under the ground & detection of insects.

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