SMART FARMER-IOT ENABLED SMART FARMING APPLICATION

INTRODUCTION:

Smart agriculture is an emerging concept, because IOT sensors are capable of providing information about agriculture fields and then act upon based on the user input. The feature of this project includes development of a system which can monitor different parameters of his field like soil moisture, temperature, and humidity using some sensors.Farmers can monitor all the sensor parameters by using a web or mobile application even if the farmer is not near his field. Watering the crop is one of the important tasks for the farmers.They can make the decision whether to water the crop or postpone it by monitoring the sensor parameters and controlling the motor pumps from the mobile application itself.

LITERATURE REVIEW:

[1]A RESEARCH PAPER ON SMART AGRICULTURE USING IOT-Rithika Srivastava,Vandana Sharma, Vishal Jaiswal, Sumit Raj.Using IoT sensors in farming collects huge data from sensors and this data is managed using cloud services. This data can be related to field maps, crop condition, weather condition, soil condition, etc. which can be accessed live from anywhere. This helps in live monitoring or remote monitoring of the farm as well as staff.

Advantages:By collecting this date will wiselby y helps in improvising the crop yielding in the farming field.

Disadvantages:By collecting this data can be only examined by data analyst and not easy for every farmers to analyse and predict the data.

[2]Role of IoT Technology in Agriculture: A Systematic Literature Review-Muhammad shoaib Farooq,Shamyla Riaz,Adnan Abid,Tariq Umer and Yousaf Bin Zikria.The primary objective of this systematic study is the collection of all relevant research on IoT agricultural applications, sensors/devices, communication protocols, and network types. Furthermore, it also discusses the main issues and challenges that are being investigated in the field of agriculture. Moreover, an IoT agriculture framework has been presented that contextualises the representation of a wide range of current solutions in the field of agriculture. Similarly, country policies for IoT-based agriculture have also been presented.

Advantages:In these research papers they had been used only about using soil moisture to collect the data to observe the moisture of the soil to analyse the

need for water.

Disadvantages:soil moisture data only provide the moisture level of the soil but the farmer need the humidity and the temperature to decide whether to water the crop or not..

[3]Smart Farming System Using Data Mining-Priyanka P.Chandak Dr. A. J. Agrawal**.**The main motive behind the smart farming system is to provide better solution to farmer for high yield. In this system all 3 main modules i.e. Irrigation, Fertilizer and pesticide modules are integrated. Smart farming system is a web application with huge amount of dataset available in backend. The data mining is used in the process of finding correlations or patterns among the dozens of fields in relational databases. Clustering algorithm is used. Clustering is the process which partitions given data set into homogeneous group based on similarities and dissimilarity.

Advantages:This system mainly concentrate about the irrigation for the crop field by using data mining.

Disadvantages:Only irrigating the field only help the farmers in a half way of the crop yields,farmers need more data for analysis.

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