

ABSTRACT

Smart Farming and Monitoring system Using Wireless Sensor Network – IoT Technology In Farming

Smart Farming and Monitoring system for Measuring the Environmental Condition Using Wireless Sensor Network – IoT Technology In Farming consist of Sense the Moisture content included in the soil and indicate that how much water its wanted and monitor the graphs and automatically indicates the needs of water by sensing the quantity of water included in the soil. It is based on the IOT concept. That we provide a device including Raspberry pi , Audreno or NodeMcu with the sensors and provides an web platform that can be usable in our smart phone ,computer or any device with active internet connection. The concept IOT (Internet of things) is the network of physical devices, Vehicles , home appliances and other items embedded with electronics , software , sensors and connectivity which enables these things to connect and exchange data. At Home we can set the device near the plant and monitor all data like how much water is included in that soil. Smart farming is the implementation of various technologies and devices like internet, cloud and the IoT devices.

As in today's world the population is increasing, and it is supposed to be around 9.7 billion by 2050 and to feed those billion peoples we need to improve the production of crops. The population is increasing and on the other hand the agricultural land is decreasing due to various reasons like industrialization, commercial markets and residential buildings are being made on those agricultural lands and to feed these billions we need to increase out production and this can be done by implementing IoT in farming. Smart Farming is also known as precision farming.