LITERATURE SURVEY

REFERENCE PAPER:

REFERENCE LINK:

https://www.academia.edu/36664759/Literature_Review_on_IOT_Based_Smart_Security_and_Monitoring_Devices_for_Agriculture

DESCRIPTION:

Joaquín Gutiérrez et al. (2014) , The paper aims at optimizing water use for agricultural crops. An algorithm was developed with threshold values of temperature and soil moisture that was programmed into a micro controller-based gateway to control water quantity. The system was powered by photovoltaic panel sand had a duplex communication link based on a cellular-Internet interface that allowed for data inspection and irrigation scheduling to be programmed through a web page. The issue is that the investment in electric power supply would be expensive.

Shakthi priya N et al. (2014) , As mentioned it reviews the state of art wireless sensor technology in agriculture. Based on the value of soil moisture sensor the water sprinkler works during the period of water scarcity. Once the field is sprinkled with adequate water, the water sprinkler is switched off. Here by water can be conserved. Also the value of soil pH sensor is sent to the farmer via SMS using GSM modem. The issue is that it provides only precision values that is not accurate and is not cost efficient.

G.MeenaKumari et al. (2014) , The approach proposes technological development in Wireless Sensor Networks made it possible to use in monitoring and control of greenhouse parameter in precision agriculture In the Field bus concept, the data transfer is mainly controlled by hybrid system(wired and wireless) to automate the

system performance and throughput .ZigBee protocols based on IEEE 802.15.4 for wireless system are used. The atmospheric conditions are monitored and controlled online by using Ethernet IEEE 802.3. Partial Root Zone Drying Process is implemented to save water. Also Controller Area Network (CAN) and Hybrid networks are used. It uses traditional communication system is used. The future research can be focused on Optical communication System with wavelength routing networks and can also be implemented using advanced ARM Controllers and core processors and also in energy saving data fusion and other directions.

BezaNegashGetu et al. (2015) , It investigate the design and simulation of an electronic system for automatic controlling of water pumps that are used for agricultural fields or plant watering based on the level of soil moisture sensing. The speed of the motor is varied according to the level of the soil moisture content; the motor is OFF during maximum wet and is running with HIGH speed during dry soil conditions respectively. The duration of water pumping is controlled by a timer circuit. The system is tested using NI MULTISM simulation software. DIAC and TRIAC techniques are used. The issue is that it does not support several water levels and uses old techniques.