IoT Based Smart Crop Protection System for Agriculture

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PROBLEM STATEMENT:

- The significant problem which raises the requirement of this project was that the traditional agriculture method consumes time, manual labor work and is also not cost efficient.

- The detected signal from the soil moisture sensor is processed by a conditional comparator circuit corresponding to different levels of

actual soil moisture content. A logic circuit follows the conditional circuit with its output signals used to activate a system of relays that control the power circuit of the motors used for water pumping.(1)

- IOT is developing rapidly and widely applied in all wireless environments. In this paper, sensor technology and wireless networks integration of IOT technology has been studied and reviewed based on the actual situation of agricultural system. A combined approach with internet and wireless communications, Remote Monitoring System (RMS) is proposed.(2)

- The system consists of esp8266 (nodeMCU), soil moisture sensor, dihydrogen monoxide sensor, GPRS and GSM module, servo motor, dihydrogen monoxide pump, etc. to obtain the required output.(4)

- The system was powered by photovoltaic panels and 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.(4)

[1]

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