



SOLAR AUTOIRRIGATION SYSTEM USING SOIL MOISTURE SENSOR TECHNOLOGY

solar power

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The main objective of this book was to design a small scale irrigated system that would use water in more well-organized way in order to prevent excess water loss and minimize the cost of labor. The water saving was also an important feature, since there is demand to decrease water loss and to Maximize the efficiency used. The Power consumption must also be monitored. Soil moisture sensors will be placed inside the field, and it will be connected to the microcontroller. The moisture sensor will be continuously sensing the moisture content of the soil and sending it to the microcontroller, where moisture content value will be compared with predefine level. Now whenever the moisture level becomes less than the predefined level, microcontroller will send a command to activate the water pump. Same time microcontroller will activate GSM module, which will send a feedback message to user, stating that the "Pump ON". After the motor gets started and starts supplying water to the field; simultaneously the moisture sensor will be sensing the moisture content and sending the data to the microcontroller.

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