SOLAR POWER AUTOMATIC PLANT WATERING SYSTEM

A Socially Relevant Project report submitted in partial fulfillment of the requirements For the

award of the degree of

BACHELOR OF TECHNOLOGY IN
ELECTRICAL & ELECTRONICS ENGINEERING

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CERTIFICATE

This is certify that the socially relevant project report entitled "SOLAR POWER AUTOMATIC PLANT WATERING SYSTEM" is a bonafide work submitted by N.SRI HARSHA VAMSI,P SAI HEMANTH, G.CHAKRI , S.ADI NARAYANA P.A.V.N.S. DEEPAK.
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Abstract:

Agriculture is the source of living of majority Indians and it also has a countless influence on economy of the country. The objective of our project is to reduce this manual involvement by the farmer by using an automated irrigation system which purpose is to enhance water use for agricultural crops. The inspiration for this project came from the countries where economy is based on agriculture and the climatic conditions prime to shortage of rains & scarcity of water. The farmers working in the farm lands are only dependent on the rains and bore wells for irrigation of the land. Even if the farm land has a water-pump, manual involvement by farmers is required to turn the pump on/off when needed. The project is intended to cultivate an automatic irrigation system which controls the pump motor ON/OFF on sensing the moisture content of the soil. In the field of agriculture, use of appropriate technique of irrigation is essential. The advantage of using this technique is to reduce human intervention and still certify proper irrigation. A software application was developed by predetermining the threshold values of soil moisture, temperature and water level that was programmed into an arm controller. This paper presents the controlling and monitoring the level of water and detecting the soil moisture content.

Keyword: Microcontroller, Irrigation, Soil Moisture Content, Automated Irrigation Mechanism