

Minimizing irrigation water losses in flooded paddy using low cost sensor unit

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■ **ABSTRACT** : Optimum development and efficient utilization of water resources, assumes great significance research in water management in the developed countries is progressing towards real time irrigation, decision support systems and expert systems. As the farm holdings are not large enough in India and also high cost of automation cannot be realized in India, low cost auto irrigation suitable to farmers, if developed and can be made as technology, farmers can feel comfortable in view of the frequent power cuts and less power available in his form. To apply simple electronic circuit principles in irrigation, an attempt has been made to develop low cost auto irrigation based on soil moisture or timer. The device tested in the lab conditions has proved successful and can be very well adapted to paddy fields by slight modifications ensuring no time lag in the reduction of water level in the burette and surrounding water level in the fields. With low cost metal cylinders with sufficient openings and sensors fixed at recommend water levels, without time lag could also be easily made successful.

■ **KEY WORDS** : Water loss, Irrigation, Flooded paddy, Low cost, Sensor unit

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