Abstract

Agricultural sector is backbone of Indian economy. As population growth results in an increasing demand on water supply. Usually, growers determine how much water is needed to irrigate their field based on the amount of time elapsed since last irrigation cycle. An automated irrigation system enables the users to constantly monitor the relative soil moisture at many different locations throughout the field to more precisely schedule irrigation cycles. The sensing system is based on a feedback control mechanism with a centralized control unit which regulates the flow of water on to the field in the real time based on the instantaneous temperature and moisture values. Depending on the varied requirement of different crops, a
lookup table has been prepared and referred to for ascertaining the amount of water needed by that crop.

References

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Index Terms

Computer Science
Wireless

Keywords
Moisture Sensing  Temperature Sensing  Microcontroller  Wsn.