

IoT Based Horticulture for Farmers

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Abstract: *This paper presents an IoT Based Horticulture System designed for farmers to monitor and automate crop growth parameters using embedded systems and wireless communication. The proposed system integrates sensors like DHT11 and soil moisture sensors with a NodeMCU (ESP8266) microcontroller to collect data such as temperature, humidity, and soil moisture. These parameters are processed and monitored in real-time through cloud platforms and mobile applications, enabling efficient water usage and optimized crop yield. This system is especially useful in dry regions and for farmers lacking consistent rainfall, as it automates irrigation and climate control. The integration of IoT helps enhance productivity, conserve resources, and empower farmers with actionable insights..*

Keywords: ESP8266, IoT

