Soil And Water Testing With Irrigation Control

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Abstract

A simple IOT-based soil and water testing system for evaluating the characteristics of arid soil was created. To track the changing soil quality and water availability while maximising water use effectiveness across the seasons, a sensor-based monitoring system with ethernet connectivity and mobile IoT is developed. This study is centred in the Indian state of Maharashtra, which is one of the major producers of oil and pulses and has a diversity of soil types. The primary crop that was taken into account was soybean because it is a crop that is widely grown in the area. Up until seed germination and roots, this crop was under observation. When compared to seeds produced using the traditional way of production, those produced using the IoT-based smart system were larger.

Any automated irrigation system can benefit from this IOT-based monitoring system’s assistance. This method makes it very simple to collect data, analyse that data, and use that understanding to distribute water without the need for manual labour.

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