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## AN OVERVIEW ON AUTOMATIC IRRIGATION SYSTEM

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### ABSTRACT

*A modern irrigation system was created to reduce the amount of water used in agricultural fields as well as improve the food quality. In the agriculture field, a lot of water and other resources are wasted. We are utilising an automated plant monitoring system to avoid this problem. Many farmers will be able to afford this low-cost automated irrigation system. According to the findings, the system is effective in providing an appropriate amount of water to improve crop yield. We use different sensors in contemporary irrigation systems, such as temperature, humidity, and soil moisture sensors, which sense the various elements of the soil and automatically water the area depending on the soil moisture value by turning on and off the motor. Irrigation automation is a potential technique for reducing irrigation waste and increasing water efficiency. Automation allows farmers to irrigate just when there is a pressing need for water and distribute nutrients in a regulated and exact way, saving time and resources while improving agricultural efficiency and yield. The automatic irrigation system makes an irrigation system more reliable and remove loses of existingsirrigation system. This smart irrigation system allows plants to be watered for longer periods of time while maintaining optimal growth conditions. It saves time, and a timer delay based on the weather may be programmed for automated watering. This intelligent watering system may be changed and updated in response to changes in the environment.*

**KEYWORDS:** *Automatic irrigation, Crop, Mobile phone, microcontroller, sensor, soil, Temperature.*

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