

## ABSTRACT

Title : **MCU Based Drip Irrigation and Fertigation System With Wireless Drip Irrigation Feature**

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Automation of Irrigation and Fertigation is a good help for farmers of today. But having it monitored and controlled by a cellular phone makes a great difference. MCU Based Drip Irrigation and Fertigation System with Wireless Drip Irrigation Feature is a system that is able to water and fertilize plots automatically. To conserve time and energy of the user, to assure the correct amount of water and fertilizer to be mixed and to have equal distribution of water to irrigate farm are the concerns of this study.

The automation of the system is controlled through a programmable Microcontroller Unit. It processes the reading from resistivity sensor, controls the opening of valves and mixing of water and fertilizer. The mechanical part ensures the equal distribution of water. Through various experimentations and assessment, the researchers were able to program the necessary codes and assemble the mechanics that make the system efficient and user friendly.