# PROJECT EXPO

**Team Name**: V Automators

**Team Member details:**

**Team Leader:** M. Vasanthakumar

**Team Members:**

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**Project Domain:** Effective water source management for smart farming

**Project Category:** Hardware and software

## Abstract Idea:

- In modern times food scarcity has been looming around due to the rapidly rising population. By not managing the farm lands optimally, the productivity yield is reduced.

- Water management is one of the core reasons as it is also a scarce resource and not managing it well would both damage crops and waste water.

- To get the best results a well balanced system needs to be implanted that manages the water supplied to the crops and this the main focus of our project.

## Objective:

- Our project is to design an automatic water irrigation system that uses the method of drip irrigation. We have chosen this method as it is very water conservative and costs comparably less than other conventional methods.

- The whole setup utilizes sensors that provide the user with accurate readings about the condition of the crop. The users also has the ability to

choose between manual control over watering the crops or user will be able to pre-set the required actions so that its done automatically.

- The overall most significant benefit of using this system is that a heavy burden is lifted off the shoulders of the user as the system takes over. This method will also reduce the wastage of water and at the same time provides the maximum yield. The maintenance of this system is considerably easy and the sensors used are rugged and build to withstand harsh conditions.

- This method of smart farming does is budget friendly and user friendly to all the users

- Application will be developed for the users so that they could control the pumping of the motor by just doing a simple clicking through the mobile app.

- The motor automatically gets turned off when the water level goes beyond the threshold value which has been set up in the program.

- The temperature, moisture level and the humidity of the soil will be displayed in the app which will be determined through the various sensors.

- Manual control can be done through **on and off button** through our app.