# Smart Irrigation | Soil Moisture Sensor Arduino | Water Pump

Here, We learn How to make a Smart Irrigation System in which Arduino can sense the moisture in soil and watering it accordingly.

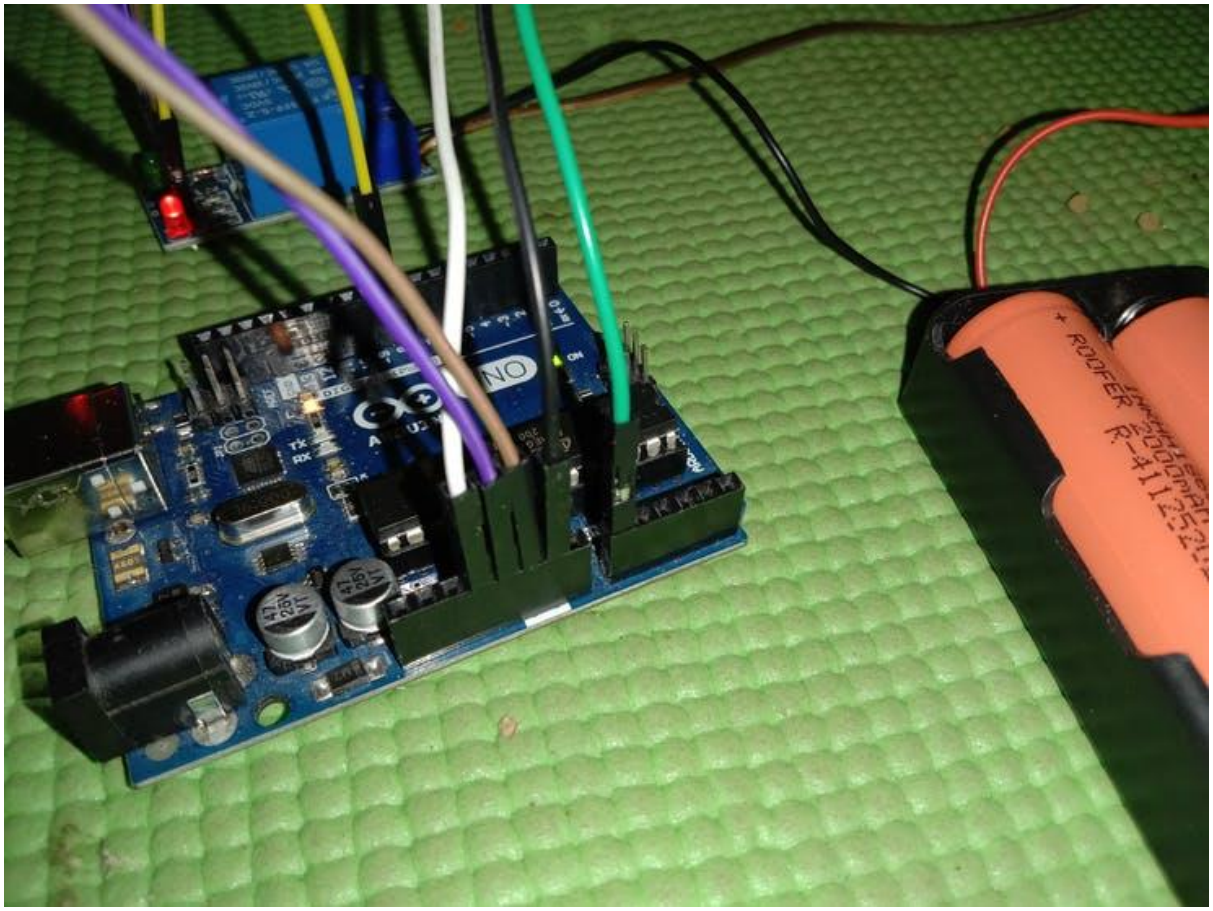
## Things used in this project

### Hardware components

| | | |
|---|---|---|
|  | Arduino UNO | × 1 |
|  | SparkFun Soil Moisture Sensor (with Screw Terminals) | × 1 |
| | Relay (generic) | × 1 |
|  | Jumper wires (generic) | × 1 |
|  | 9V battery (generic) | × 1 |

### Software apps and online services

| | |
|---|---|
|  | Arduino IDE |



https://youtu.be/jT84AOyxVSg

Improvements:

1. We shall also develop mechanism to predict salinity, alkanity, acidity of the soil.
2. Size of soil particles can also be approximated using light sensors.
3. Colour of soil can also be added to the output.
4. Soils purity can also be approximated using the same sensors.

These improvements if added in the model, will prove a great beneficial for farmers. In rural areas most of the marginal farmers are unaware about these things and they hence grow crops which aren't feasible on their soil. By providing this type of service they can be benefitted and on the whole different crops can be obtained .