

ABSTRACT:

Nowadays people are becoming more health conscious and trying to avoid chemicals in the food they intake. In macro agriculture, large amount of chemicals are used to increase the productivity. So, people are moving towards organic farming and rooftop agriculture. They started to cultivate fruits and vegetables for their basic needs around their house like terrace, balcony, etc. There are many problems faced during this venture. One of them is irrigating the plants daily. All the plants should be watered timely and sufficiently for their rich growth. People who have gardens are unable to go on long holidays as it would disturb the watering cycle of the plants. In order to relieve the people from the same, we have come up with a system that would water the plants on its own just by a touch. This automatic irrigation system would be equipped with Arduino, sprinkler irrigator (if not possible, a bottle irrigator). Once the user switches on the motor, the field gets irrigated. The moisture of the soil is measured using humidity sensor. If it reaches above the level the motor gets turned off automatically. If Agriculture goes wrong there's a possibility for everything else to become wrong. To avoid such mistakes, we are in need of smart agriculture or smart gardening. It would be a great benefit if our country takes steps to implement our ideas in each part of the country.

PROBLEM STATEMENT:

Agriculture is the backbone of India. People depend on agriculture for their food and basic needs. Farmers are the real strugglers who put in lot of efforts to cultivate and harvest various crops. Irrigation plays a major role for the harvest of crops. Manual irrigation is very difficult , since it requires a lot of man power to irrigate. Farmers should be present directly in the fields which is not possible all the time . So we aim to promote automatic irrigator which will stimulate to on/off the motor when it is required.

BLOCK DIAGRAM:

