# Pesticide sprinkler in farm fields without using drones as they are not cost effective

The National Institute of engineering, Mysore/1st SEM/E&C -A Section

## PROBLEM STATEMENT

Pesticide sprinkler in farm fields without using drones as they are not cost effective .

Sprinkler irrigation is any irrigation that uses a pressurized system to apply water in a method that mimics rainfall to the soil surface.

### **TEAM MEMBERS**

Ksheeraj S.K Chandrashekar A.R Ansh vinod patil Bhavana N Kumar Disha L Bhavna R

### INTRODUCTION

Sprinkler irrigation is widely used because it is versatile, adaptable to almost all crops, and affordable. But it's not a perfect irrigation system. Spray irrigation is one of the most inefficient watering methods, wasting approximately 30 to 50% of the water applied through run-off and evaporation. Only flood irrigation is a more potentially inefficient method of irrigation crops, whereas systems like drip irrigation and sub-irrigation use much less water to achieve effective application rates.

Sprinkler irrigation is any irrigation that uses a pressurized system to apply water in a method that mimics rainfall to the soil surface

### **IDEA GENERATION**

We have designed a sprinkler with the help of arduino uno, a soil moisture sensor, water pump, relay motor, and a battery, the arduino runs with the help of a code, the soil moisture sensor detects the amount of moisture present in root zone of a crop and sprinkles the required amount of pesticides.

# PROTOTYPE IMAGES

