



### **AERIS COMMUNICATIONS Problem Statement :**

Closed loop irrigation solution for farmers:

Irrigating fields plays a vital role in crop yield. However, how much and when to irrigate is still moderated by the traditional knowledge for the farmers. Knowing how much water is actually required for a given crop for a particular soil type depends majorly on soil's capacity to hold moisture. We need an IoT, AI based solution which can auto irrigate the fields for a given crop based on the soil moisture content.

Features:

1. Know the moisture content in the soil using sensors
2. Predict the weather condition
  - a. If there will be rain, no need to switch on the motor
  - b. If it will not rain, switch on the motor
3. Based on the soil moisture present, determine the quantity of water to be released for irrigation
4. Stop the motor when required soil moisture content has been achieved
5. Automatic start and stop of the motor for irrigating water in the field