**SMART AGRICULTURE SYSTEM**

This project automates the agriculture system.

1. It detects the soil moisture from the field and the temperature from the atmosphere.

2. Based on these values, it automatically switches on a water pump, which irrigates the field. This pump runs for a fixed amount of time according to the water needed.

3. An ultrasonic sensor detects the water level in the tank and alerts the farmer if it becomes empty.

4. There is an additional alarm system, which turns on in case the temperature in the field becomes abnormally high.

5. The system also identifies the GPS coordinates of the farm, and informs the farmer about the type of soil in his farm, climatic conditions and suitable crops. All this data is fetched from an existing database.