

SmartFarmer - IoT Enabled Smart Farming Application

Problem Statement :

Farmers are under pressure to produce more food and use less chemicals and water in the process. A remote monitoring and control system will help farmers deal effectively with these pressures. Each field should get the right amount of water at just the right time. Under-watering causes crop stress and yield reduction. Over-watering can also cause yield reduction and consumes more water and fuel than necessary and leads to soil erosion and fertilizer, herbicide, and pesticide runoff. This project helps the farmer in monitoring different parameters of his field like soil moisture, temperature, and humidity using some sensors. Farmers can monitor all the sensor parameters by using a web or mobile application even if the farmer is not near his field. Watering the crop is one of the important tasks for the farmers. They can make the decision whether to water the crop or postpone it by monitoring the sensor parameters and controlling the motor pumps from the mobile application itself.