

PROBLEM STATEMENT:

- 1. To provide efficient decision support system using wireless sensor network which handle different activities of farm and gives useful information related to farm.
- 2. In the case of traditional irrigation system water saving is not considered. Since, the water is irrigated directly in the land, plants under go high stress from variation in soil moisture, therefore plant appearance is reduced. The absence of automatic controlling of the system result in improper water control system.
- 3. At present there is emerging global water crisis where managing scarcity of water has become a serious job. This growth can be seen in countries which have shortage of water resources and are economically poor. So, this is the serious problem in agriculture area. So, we want to design a Smart Irrigation System that operate automatically by sensing the moisture content of the soil and turn ON/OFF the pump using relay without the intervention of farmer and hence save water.
- 4. Farmers are under pressure to produce more food and use less energy and water in the process. A remote monitoring and control system which uses sensors will help farmers deal effectively with these pressures.
- 5. Farmers are taking a lot of time monitoring the status of all their lands and crops. Lack of timely information and appropriate reaction can lead to enormous losses in crop yield. By using smart technologies for remote monitoring and control using sensors on all plant growing processes, farmers get instant information for all their crops and fields.