

PROJECT SCOPE

Project name : **SMART AGRICULTURAL SYSTEM**

Project scope:

The stronger the base, the better the built. Agriculture forms the base of an economy. Better the agricultural system, better is the economy.

Agriculture provides raw materials to many industries which form the backbone of the nation. Most importantly, it helps a nation to thrive by providing food and other agrarian products. India, for example, which is primarily an agrarian country, has a bulk of the working population engaged in agricultural activities.

Agriculture is important not only for the Supply of Food but also for the Provision of Raw Materials for other Industries such as Textiles, Sugar, Jute, Vegetable oil and Tobacco. Agriculture is not only an Occupation for People but also a Way of life. Most Customs and Cultures in the World revolve around Agriculture.

This project will play a vital role in agricultural industries by enhancing the irrigation system.

Project background:

With growing population and increasing demand of products we need to come up with smart methods to meet the needs accordingly.

Smart agricultural system based on IOT helps in monitoring soil moisture and climatic conditions to grow and yield a good crop. Farmer is provided a mobile app using which he can monitor the temperature, humidity and soil moisture parameters along with weather forecasting details. Based on all the parameters. This measurement can be done by fixing sensors. Sensors help to know the moisture content and soil conditions. So accordingly, he can water his crop by controlling the motors using the mobile application. Even if the farmer is not present near his crop he can water his crop by controlling the motors using the mobile application from anywhere. This way the work can be done with less labour and more efficiently.

Functional requirements:

- temperature
- humidity
- soil moisture
- weather forecasting
- allow user to turn on/off the motors accordingly.
- sensors to know the soil conditions.

Project deliverables:

- web application
- project report
- power point presentation

Constraints:

The main concerns that accompany the Internet of Things are the breach of privacy, over-reliance on technology, and the loss of jobs. As time has progressed, our current generation has grown up with the readily availability of the internet and technology in general. However, relying on technology on a day to day basis, making decisions by the information that it gives up could lead to devastation. No system is robust and fault-free. We see glitches that occur constantly in technology, specifically involving the internet. Moreover weak internet connection can make the system ineffective.