

Team ID	PNT2022TMID46724
Project Title	SmartFarmer - IoT Enabled Smart Farming Application

OBJECTIVES OF SMART FARMER

The main objective of this project is to improve the crop yield and thereby meet the demand. This project remotely measure and monitor water moisture levels in the soil to ensure that crops are getting optimal water resources and automatically trigger sprinkler systems to address low moisture levels in the soil to prevent crop damage or loss. This idea will improve the crop yield and manage them.

Plants have had and still have a key role in the history of life on earth. They are responsible for presence of oxygen needed for human survival on this planet. At the same time agriculture is also important to human beings because it forms the basis for food security. It helps human beings grow the most ideal food crops and raise the right animals with accordance to environmental factors. Agriculture plays a vital role in India's economy. Over 58% of the rural households depend on agriculture as their principal means of livelihood. Agricultural export constitutes 10% of the country's exports. So the farmer's and even the nation's economy will be ruined if there are no proper yields due to lack of knowledge of the soil nature, timely unavailability of water. Thus the government should take steps for a better and profitable irrigation. It is a smart farming stick based on IOT (Internet of things) technology which has brought revolution to each and every field of common man's life by making everything smart and intelligent. Aim of this project is to propose a novel smart IOT based agriculture stick assisting farmers in getting live data (soil moisture, humidity, water level) for efficient environment monitoring which will enable them to do smart farming and increase their overall yield and quality of products. The smart agriculture being proposed via this project is integrated with Arduino technology, mixed with various sensors and live data feed can be obtained online from mobile app.