

## Ideation Phase

### Define the Problem Statements

Date	19 September 2022
Team ID	PNT2022TMID48510
Project Name	Smart Farmer – IOT Enabled Smart Farming Application
Maximum Marks	2 Marks

#### Customer Problem Statement:

Agriculture is representing an essential element in the developing countries .In the agriculture, there is problem for farmers to making a suitable crop for the soil to get the better yield. Soil analysis is a valuable tool for the problem .Our system providing a smart technology for soil analyzing. Therefore, it results in helps the farmers to making a suitable crop and improves the yield

A handheld Soil health profiler can solve these issues by giving the soil nutrient details and recommend suitable crops.This project involved an NodeMCU which talk to the internet. Soil NPK sensor to measure level of the macro nutrients present in the soil. The sensor data is send to the cloud server. Then the digitally generated soil fertility and crop prediction e-report is get in the specified link. It is very useful for farmers to cultivate suitable crop to the field. It improves soil quality and soil fertility. This gives more yields for the farmers. The designed system can be an easy alternative for the lengthy laboratory process. The designed system also takes the inputs like the geographical location, season of the year, etc to make the recommender system.

