

**Project Design Phase-I**  
**Proposed Solution Template**

Date	23 September 2022
Team ID	PNT2022TMID33619
Project Name	Project – IoT based smart crop protection system for agriculture
Maximum Marks	2 Marks

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Develop affordable app-based solution for Soil health monitoring and suggest which crop to be sown based on it.
2.	Idea / Solution description	Create app-based solution to detect soil parameters like moisture content, temperature, relative humidity, nutrient, Ph, CEC, NPK etc.
3.	Novelty / Uniqueness	Farmers can take immediate actions resulting better crop produces and farmers have better income. High Yield and prescriptive guidance
4.	Social Impact / Customer Satisfaction	They enable farmers to produce more crops per unit area with less tillage, thus reducing deforestation, conserving natural resources and curbing soil erosion. Pesticides are also critical for the control of invasive species and noxious weeds.
5.	Business Model (Revenue Model)	It provides a unique, easy to use solution to cotton farmers by selectively controlling broad-leaved weeds and preserving the health of the cotton crop. We are innovating on a ready pipeline of products to provide complete solutions for weed control in cotton, paddy, tea, sugarcane, corn and horticultural crops.
6.	Scalability of the Solution	To develop system which provide prediction of possible pest/disease/insect attack on crop & Predict the crop yield production. Farmers based on the farm historical data, local terrain, weather scenario, various sensor inputs rather than generic guidance. The prediction expected to be at farm level so that individual farmer may take immediate action.