

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

<b>Date</b>	6 October 2022
<b>Team ID</b>	PNT2022TMID33827
<b>Project Name</b>	SmartFarmer-IoT Enabled Smart Farming Application
<b>Maximum Marks</b>	2 Marks

**Proposed Solution Template:**

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

<b>S.No.</b>	<b>Parameter</b>	<b>Description</b>
1.	Problem Statement (Problem to be solved)	In order to avoid issues in the amount of water in the soil, to measure the amount of nutrient content to avoid nutrient deficiency, to sense the variation in intensity of sunlight and to measure the amount of chemical in the soil properly, we use soil moisture sensor, NPK sensor, LDR sensor and electrochemical sensors respectively. These sensors solve the above the respective problems effectively.
2.	Idea / Solution description	By predicting the above problems with the help of these sensors, we will be able to tackle problems in contents of nutrients, water and moisture level which makes the soil more fertile ,helps the plants to grow healthy and makes the farmers happy by yielding good production and profit
3.	Novelty / Uniqueness	It estimates correct amount of water content, nutrients available in the soil and senses variation in the intensity of sunlight accurately.
4.	Social Impact / Customer Satisfaction	By rectifying the problems like soil moisture level, soil and nutrient content, we will be able to produce healthy greeny fresh plants or crops and when the yield goes high, price of them goes low which leads to customer satisfaction.
5.	Business Model (Revenue Model)	The use of these sensors makes the private and public companies to earn a good revenue and to run a good profitable business in future
6.	Scalability of the Solution	Scalability of the solution for the above problems can be done by the use of the above sensors which involve measuring accurate amount of water, soil and nutrient content, moisture level and proper measuring of variation in the intensity of sunlight.