

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

Date	27 September 2022
Team ID	PNT2022TMID31852
Project Name	SmartFarmer - IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

**Proposed Solution :**

Project team shall fill the following information in proposed solution.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Farmers are under pressure to produce more food using less energy and water in the process along with efficient monitoring of environment and field parameters without use of too much manpower and they also want their solution to be cost effective to gain overall profit after implementing it.
2.	Idea / Solution description	Smart farming refers to managing farms using technologies like IoT and AI to monitor environmental and field parameters using various sensors and use analysis to efficiently use resources like water and energy with additional reduction of manpower.
3.	Novelty / Uniqueness	Though all smart farming projects have information obtained from sensors, analysis and display of results, our project's uniqueness lies in displaying of results as a user-friendly web page and mobile application and also sending alert messages during emergency situations so that user gets adequate information at all the time.
4.	Social Impact / Customer Satisfaction	Our project has widespread social impact in improving farming and equipping farmers with results of advanced scientific analysis which helps them to reduce cost and also save manpower while having a better yield thereby providing utmost customer satisfaction.
5.	Business Model (Revenue Model)	Business model will be a SaaS model where information will be hosted as an application on cloud where users need to pay a certain reasonable and affordable amount to get access to it leading to a mutual benefit for both users and the organization.
6.	Scalability of the Solution	Solution would provide enough room for addition of further nodes and also improve its overall performance based on the further information provided without having too many changes in implementation.

