

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

Date	19 September 2022
Team ID	PNT2022TMID04707
Project Name	Smart Farmer- IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

**Proposed Solution :**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"> <li>Watering the field is a difficult process, Farmers have to monitor the field for moisture content and supply water according to it.</li> <li>Some other challenges are Lack of knowledge, Cost , Security Concerns, etc.,</li> </ul>
2.	Idea / Solution description	<ul style="list-style-type: none"> <li>Smart farming techniques enable farmers better to monitor the fields and maintain the humidity level accordingly.</li> <li>The data collected by sensors, in terms of humidity, temperature, moisture and dew detections help in determining the weather pattern in farms. So water can be provided accordingly and cultivation can be done for suitable crops.</li> </ul>
3.	Novelty / Uniqueness	<p>ALERT MESSAGE – IoT sensor nodes collect information from the farming environment, such as soil moisture, air humidity, temperature and water quality, then transmit collected data to IoT backhaul devices.</p> <p>REMOTE ACCESS – It helps the farmer to operate the motor from anywhere</p>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>IoT can help improve customer relationships by enhancing the customer's overall experience</li> <li>Reduces the wages for labours who work in the agricultural field.</li> <li>It saves a lot of time.</li> <li>Easily identify maintenance needs, build better products, send personalized communications, and more</li> <li>It make a wealthy society</li> </ul>
5.	Scalability of the Solution	Scalability in smart farming refers to the adaptability of a system to increase the capacity, for example, the number of technology devices such as sensors and actuators, while enabling timely analysis.