

Project Design Phase-I
Proposed Solution

Date	03 October 2022
Team ID	PNT2022TMID05038
Project Name	IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	IoT-based agriculture systems help the farmer in monitoring different parameters of his field like soil moisture, temperature, and humidity using some sensors.
2.	Idea / Solution description	Our system comprises the following elements to come up with a solution: <ol style="list-style-type: none">1. Pest control.2. Timely irrigation.3. Constant nutrient monitoring.4. Estimated time for cultivation.5. Additional nutrient supplements.6. Estimated crop yield.7. Environment monitoring.
3.	Novelty / Uniqueness	Our system could function in both solar and battery mode. The inbuilt battery delivers power during the necessary times. It also delivers remote sensing facilities.
4.	Social Impact / Customer Satisfaction	Upon implementing customers feel : <ol style="list-style-type: none">1. Seeing nearby adopting better agriculture practice.2. Better income rates.3. Better yield.4. Feeling motivated.5. Stable income.6. Happy to work.7. Feeling comfortable with the practices
5.	Business Model (Revenue Model)	Our system comprises of hardware and software part: Hardware: <ol style="list-style-type: none">1. Controller(Brain) - 80002. Solenoid valves - 5000/piece3. Pipe materials - needed to be provided by the land owner(May vary from place to place).

		<p>4. Cloud storage of data - 10000/Month(For n customers can be scaled up on demand)</p> <p>Roughly sums around - 25000</p> <p>Additionally we can generate income by increasing the number of controllers since it is limited to a specific area.</p> <p>Additional income - Ads posted on our mobile and web application platform</p>
6.	Scalability of the Solution	<p>This system of ours is like a lego which can be stacked and scaled up for a larger growth area.</p>