

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

Date	03 October 2022
Team ID	PNT2022TMID05038
Project Name	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"> <li>1. Pest control.</li> <li>2. Timely irrigation.</li> <li>3. Constant nutrient monitoring.</li> <li>4. Estimated time for cultivation.</li> <li>5. Additional nutrient supplements.</li> <li>6. Estimated crop yield.</li> <li>7. Environment monitoring.</li> </ol>
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"> <li>1. Seeing nearby adopting better agriculture practice.</li> <li>2. Better income rates.</li> <li>3. Better yield.</li> <li>4. Feeling motivated.</li> <li>5. Stable income.</li> <li>6. Happy to work.</li> <li>7. Feeling comfortable with the practices</li> </ol>
5.	Business Model (Revenue Model)	Our system comprises of hardware and software part: Hardware: <ol style="list-style-type: none"> <li>1. Controller(Brain) - 8000</li> <li>2. Solenoid valves - 5000/piece</li> <li>3. Pipe materials - needed to be provided by the land owner(May vary from place to place).</li> <li>4. Cloud storage of data - 10000/Month(For n customers can be scaled up on demand)</li> </ol> <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	This is system of ours is like a lego which be stacked and scaled up for larger grow area.