

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

Date	03 October 2022
Team ID	PNT2022TMID05121
Project Name	IoT Based Smart Crop Protection System for Agriculture
Maximum Marks	2 Marks

**Proposed Solution Template:**

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	IoT-based agriculture System help the farmer in monitoring different parameters of his field and security for their crops from wild animals 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. Environment monitoring</li> <li>2. Water Flow control</li> <li>3. Detecting wild animals around the field</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. Detecting animals and producing sound to send away from field.
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. Stable income.</li> <li>5. Feeling comfortable with the practices.</li> </ol>
5.	Business Model (Revenue Model)	Our system comprises of hardware and software part: <ol style="list-style-type: none"> <li>1. Controller (Brain)-8000</li> <li>2. Solenoid valves-5000</li> <li>3. Pipe materials- Needed to be provided by the land owner.</li> <li>4. Cloud storage of data- 10000/Month.</li> <li>5. Needed sensors and other- 5000</li> </ol> Roughly sums around – 30000 Additionally, we can generate income by increasing the number of controllers.
6.	Scalability of the Solution	This system of ours is like a Lego which can be stacked and scaled up for a larger growth area.