# Project Design Phase-I
# Proposed Solution

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| Date | 13 October 2022 |
| Team ID | PNT2022TMID30597 |
| Project Name | Smart Farmer - IoT Enabled Smart Farming Application |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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

| S.No. | Parameter | Description |
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| 1. | Problem Statement (Problem to be solved) | Farmers are under pressure to produce more food and use less energy and water in the process. A remote monitoring and control system will help farmers deal effectively with these pressures Soil erosion and soil nutrient loss, product satisfaction customers adaptation to climate, usage of harmful fertilizer and manure and pesticides are major problem faced by farmers For taking agriculture to the next generation, only fresh water can be used for farming. Farmers are more affected and annoyed by the above factors. |
| 2. | Idea / Solution description | The IoT-based agriculture system helps the farmer in monitoring different parameters of his field like soil moisture, temperature, and humidity using some sensors. Farmers can monitor all the sensor parameters by using a web or mobile application even if the farmer is not near his field. Watering the crop is one of the important tasks for the farmers. They can make the decision whether to water the crop or postpone it by monitoring the sensor parameters and controlling the motor pumps from the mobile application itself. |
| 3. | Novelty / Uniqueness | Building a community of farmers around the globe will definitely do great, where they can find lots and lots of information about crops and plantations directly from the other farmers and the agricultural experts around the globe. |

| 4. | Social Impact / Customer Satisfaction | The good thing is that IoT instructs or alerts them to do the amount of work at the right time. So that the yielding will be more and good, it also reduces the attention and time required to the field, which makes the Customer Satisfaction. On the other hand the main disadvantage is that IoT reduces the number of laborers and their wages, as a resultmany people may lose their work. |
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| 5. | Business Model (Revenue Model) | Many agricultural products like fertilizers, pesticides, manure, and field equipment canalso be promoted in the form of ads. A small amount of subscription fee can also be collected from the farmers. |
| 6. | Scalability of the Solution | The scalability of the above proposed solution is not limited. Here a lot of sensors and analyzing tools and algorithms can be integrated to provide the best experience. |