

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

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|---------------|---|
| Date          | 19 September 2022                                   |
| Team ID       | PNT2022TMID07443                                    |
| Project Name  | SmartFarmer - IoT Enabled Smart Farming Application |
| Maximum Marks | 2 Marks   |

**Proposed Solution:**

| S.No. | Parameter                                | Description   |
|-------|--|---|
| 1.    | Problem Statement (Problem to be solved) | To provide efficient decision support system using wireless sensors network which handle different activities of farm and gives useful information related to soil moisture, Temperature and Humidity content. Due to the weather condition, water level increasing Farmers get lot of distractions which is not good for Agriculture |
| 2.    | Idea / Solution description              | It is a network of different devices which make a self-configuring network. The new developments of Smart Farming with use of IoT, by day turning the face of conventional agriculture methods by not only making it optimal but also making it cost efficient for farmers and reducing crop wastage                                  |
| 3.    | Novelty / Uniqueness                     | IoT based Smart Farming improves the entire Agriculture system by monitoring the field in real-time. With the help of sensors and interconnectivity, the Internet of Things in Agriculture has not only saved the time of the farmers but has also reduced the extravagant use of resources such as Water and Electricity.            |
| 4.    | Social Impact / Customer Satisfaction    | Smart farming, the dependency on manual labour has reduced significantly. The processes like pest control, fertilizing, and irrigation are increasingly becoming automated, and farmers can control them remotely. The use of smart IoT sensors can maintain these processes, increasing crop production.                             |
| 5.    | Business Model (Revenue Model)           | It is trying to execute this technique as we need to introduce an Arduino gadget which was modified with an Arduino that takes received signals from sensors. Easy operability and maintenance. Required low time for maintain. Cost is reasonable.   |
| 6.    | 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 time analysis  |