**Project Design Phase-I**

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| Date | 3November 2022 |
| Team ID | PNT2022TMID42977 |
| Project Name | SMART FARMER: IOT Enabled Smart Farming Application |

Proposed Solution:

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| **S. No.** | **Parameters** | **Description** |
| 1. | Problem Statement (Problem to be solved) | Farmer are under pressure to produce more food use less energy and water in the process. A remote monitoring and control system will help farmers deal effectively with these pressures. The most of the people pumping ground water for irrigation purpose ,To provide efficiency decision support system using wireless sensors network which handle different activities of form and gives use full information related to Including precision irrigation controls and soil moisture/ water level sensing devices |
| 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 realtime. 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 labor 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 operatability 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 |