Ideation Phase Define the Problem Statements

| Date | 30 September 2022 |
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| Team ID | PNT2022TMID33671 |
| Project Name | Project – Smart Farmer - IoT Enabled Smart |
| | Farming Application |
| Maximum Marks | 2 Marks |

Problem Statement:

Farmers are under the pressure to boost food production while using less water and energy. Farmers will be better able to handle these pressures with the aid of a remote monitoring and control system.

A single pump is often used by irrigated fields to water 80 to 100 acres of land. Thus, hundreds of square miles of huge farms require 40 to 80 or more irrigation pumps. Most operate in isolated fields, producing ground water for agriculture, and require trucks to roll to them.

Every area should, in theory, receive the ideal quantity of water at the ideal moment. Under watering stresses crops and lowers yields. Additionally, overwatering reduces yield and uses more freshwater and fuel than is necessary, which leads in runoff from pesticides, herbicides, and fertilisers damages the soil.

| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
|------------------------------|--|---|--|--|--|
| PS-1 | A farmer who owns a large amount of land | To pass the effective irrigation to fields | Can't monitor the flow of water all the time. | Because it is very difficult to cover a large remote area in the land | Which leads to less crop production and a sad farmer |
| PS-2 | A farmer who is an emergency can't monitor his farm land | Needs to pass the water to irrigation | Can't access his farm land now. | Because he is no way near his farm land | Which leads to weather of plants |