Project Title: *IoT enabled Smart Farming Agriculture* | **Project Design Phase-I - Solution Fit Template** | **Team ID: PNT2022TMID27964**

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Farmers who wants to improve the yield of their crops and also know about the conditions of their crops as well as environmental conditions so they could take the necessary actions immediately.

6. CUSTOMER CONSTRAINTS — CC

The major constraint is network connectivity as it requires an unlimited or continuous internet connection to be successful.

5. AVAILABLE SOLUTIONS — AS

Drip irrigation could be the best solution to irrigation crops and has the advantage of lower evaporation than other irrigation methods.For certain crops, it is much more efficient than any other irrigation.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

Farmers must be with their phone/laptop always so that they would be alarmed when they get the message/mail.
Our main job would be making the technologies feasible for the farmers.

9. PROBLEM ROOT CAUSE — RC

Traditional watering methods can waste as much as 50% of the water used due to inefficiencies in irrigation, evaporation and over watering.In some times,farmers can't predict the sensing parameters data.
accurately.

7. BEHAVIOUR — BE

IoT applications help farmers to collect data regarding the location, well-being, and health of their crops.
Weather stations equipped with smart sensors can collect weather data and send useful information to a farmer.

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS — TR

Urge to reduce water wastage and electricity,Reducing human efforts and Increasing the crop yields.

4. EMOTIONS: BEFORE / AFTER4. EMOTIONS: BEFORE / AFTER

Before: depressed ,facing more losses.
After: confident, get chance to spend time efficiently.

10. YOUR SOLUTION — SL

Our solution for this project is to make the irrigation system efficient. By using the sensed information from the field,
the farmer will aware of real-time weather conditions like air and dew temperature, precipitation, and humidity. And also make the automation is on and off the pump.
water pump.

8. CHANNELS of BEHAVIOUR — CH

Online: The farmers can control the motor pumps through mobile application.
Offline: the farmers can get the sensing parameters data (temperature,humidity,moisture) through SMS.

Identify strong TR & EM