Project Design Phase-I - Solution Fit Template **Project Title**: SmartFarmer-IoT Enabled Smart Farming application **Team ID**:PNT2022TMID49367

1. CUSTOMER SEGMENT(S) (CS)

. Farmers who have farm field to yield crops who is seeking to save 80% of time and who needs to monitor and control more than one field at a time are out target Customers.

6. CUSTOMER CONSTRAINTS (C)

. Farmers who are uneducated will suffer operating smart phones and will find difficulty in reading and understanding crop parameters and will find difficult to control irrigation.

5. AVAILABLE (AS)

. Farmers can monitor crop parameters and control irrigation remotely using smart phone integrated to IoT.

2. JOBS-TO-BE-DONE / PROBLEMS (J&P)

. Farmers are forced to be in farm field, if any emergency Situation occurs and farmer is not in farm field there will be lack of irrigation which leads to crop damages.

. Satisfy customer's changing taste and expectations.

9. PROBLEM ROOT CAUSE (R)

. In accuracy in predicting crop parameters manually, wasting lots of time and energy in farm field.

7. BEHAVIOUR (B)

. Sensors are integrated in the farm field to monitor parameters and data in processed and sent to the cloud (node red) using raspberry pi, the farmer can see parameters and control irrigation using smart phone.

3. TRIGGERS (TR)

. Farmer want to save his time and control irrigation more than one farm field at same time.

10. YOUR SOLUTION (SL)

. IoT integrated remote farming using sensors, irrigation system and raspberry pi connected to node red, where farmer can monitor and control irrigation remotely.

8.1 ONLINE CHANNELS (CH)

. The emerging out of convergences of IT and farming techniques. it enhances the agricultural value chain through the application of Internet.

4. EMOTIONS: BEFORE / AFTER (EM)

. Farmer get bored by wasting time in farm field for irritating, what if farmer were able to control irrigation by watching movie in theatre or by watching TV.

8.2 OFFLINE CHANNELS (CH)

. Users are in offline they are only known about the previous information about the field