PROBLEM-FIT

1. **Customers segment**:

Farmers Large land owners,

Gardeners, Government

2. Customer constraints:

First of all, they should have land, they have to install the sensors on their farm which are required LoRa devices and LoRa WAN will be needed to receive the data from their farm to their mobile application

3.Available solutions:

- Crop monitoring
- Local weather monitoring
- Soil quality monitoring
- Irrigation control

4.Problems:

- Improper irrigation
- Crop rotation
- Soil erosion
- Climate change

5. ROOT/ CAUSE

- Watering the crops in the correct amount and time
- Monitoring the weather

6.BEHAVIOUR:

- Have the good internet connection
- Check the sensors regularly
- Check the notification regularly

7.Triggers:

Farmers want to make their crops healthy, control them from anywhere, and want to reduce the wages of labors. They also want to increase their yield

8.Emotions: Before: Difficulty in predicting the climate and to monitor the crops from anywhere Difficulty in watering the crops

After: Farm can be monitored easily from anywhere.

9.Solution:

- Using Local weather API, we can monitor the weather conditions.
- By using LoRa device to monitor the status of the field, and climate
- By using dth11 sensors and PIR sensor to sense the condition of the field

10.Channels of Behavior:

- ONLINE:

To get the information from the farm to the mobile application

- OFFLINE:

Checking the sensors regularly