

## Ideation Phase

### Problem Statements

#### SMART FARMER – IoT ENABLED SMART FARMING APPLICATION

##### Customer Problem Statement:

Mr. Abdul is a farmer with engineering background. He has ventured into agriculture together with his father. Recently he started farming, he needs someone to help him through the first few years. He also wants to incorporate technology into farming to cut down on work and labor cost, increase productivity, and he need ideas for improving the production. He is actively looking into a few agricultural products that would help him.

Who does the problem affect?	Farmer (Person who do Agriculture)
What are the boundaries of the problem?	Adaptable to climate change, soil erosion, biodiversity loss and Labor cost
What is the issue?	Loss of agricultural land and the decrease in the varieties of crops and livestock produced.
When does the issue occur?	Increases the pressures from climate change, soil erosion, its mostly starts from first day farming.
Why is it important that we fix the problem?	It is required for the growth of better-quality food products. It is important to maximize the crop yield. It is important to maintain the soil richness.
What solution to solve this issue?	An application has to be developed which will give the various data about the land remotely, where they can schedule some events for a month or a day. It also provides suggestions to users based on the crop they planted.
What methodology used to solve the issue?	Arduino microcontroller to control the process and various sensors for data. An alert message using GSM. Application can be developed using MIT App Inventor.