

Ideation Phase Problem Statements

Date	10 Sep 2022
Team ID	PNT2022TMID44795
Project Name	Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Customer Problem Statement:

Mr. Arvind is a farmer with a background in engineering. Together with his father, he has ventured into agriculture. Since he is just starting out in 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, increase productivity, produce more, and get ideas for how to improve the soil and plant the next crop. He is actively looking into a few agricultural products that can help him. Many beginning and experienced farmers face these issues.

Who does the problem affect?	Persons who do Agriculture
What are the boundaries of the problem?	Labor cost, Cope with climate change, soil erosion and biodiversity loss.
What is the issue?	Loss of agricultural land and the decrease in the varieties of crops and livestock produced.
When does the issue occur?	Increasing 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 soil richness
What solution to solve this issue?	An application is introduced to know about various data about their 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?	Some search results info from internet based on crop planted. Arduino microcontroller to control the process and various sensors for data. An alert message using GSM. An app built using MIT App Inventor.

Example:

I am

Farmer

I'm trying to

raising living
organisms for
food

But

less income came
from farming and it
needs lots of
hardwork

Because

**Scarcity of
capital**

which makes me feel

frustration and
think to
commit suicide