

Ideation Phase
Define the Problem Statement

Date	19 September 2022
Team ID	PNT2022TMID15940
Project Name	Smart Farmer – IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

PROBLEM STATEMENT

Who does the problem affect?	Persons who do Agriculture, Farmer
What are the boundaries of the problem?	Cope with climate change, soil erosion, biodiversity loss, invest in farming productivity, adapt and learn new technologies, stay resilient against global economic factors.
What is the issue?	Uncertainty in water supply, lack of remunerative problem, fragmentations of land holdings.
When does the issue occur?	farmers are under pressure to conserve water and use fewer agricultural inputs.
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.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
Watering the crop in agricultural field using mobile application	Farmer	Controlling the water pump and irrigation pipes	It takes too much time	Water is overflowing	Very tired and uncomfortable
Monitoring the crops using sensors	Farmer	Monitor crops using sensors	Sensor readings are not accurate	Sensor requires continuous power supply	Uncomfortable and to measure manually.