

# Ideation Phase

## Define the Problem Statement

Date	010 October 2022
Team ID	PNT2022TMID26196
Project Name	<b>Project</b> - Fertilizer Recommendation System for Disease Prediction.
Maximum Marks	2 Marks

### Problem Statement:

Mr. Surender is a 55-year-old man. He had an own farming land and do Agriculture for past 30 Years. In this 30 Years he had faced a problem in choosing fertilizers and controlling of plant disease. Surender wants to know the better recommendation for fertilizers for plants with the disease. He has faced huge losses for a long time. This problem is usually faced by most farmers. He needs to know the result immediately.

I am	I'm trying to	But	Because	Which makes me feel
a Farmer	I'm trying to predict the plant disease in my farm.	I'm unable to control the plant disease on the crops in my farm.	Because I facing problem in choosing the fertilizers for the disease.	Worried
Mr. Surender is a 55-year-old man. He had an own farming land and do Agriculture for past 30 Years.  In these 30 years he had facing a problem of plant diseases.	Surender wants to predict the plant disease and according to that he will buy the fertilizers.  By this he will prevent his crops from the plant disease.	The presence of plant diseases on an agricultural farm cost Surender a lot of money.  The traditional method of physically analysing particular aspects of leaves.	Increasing agricultural production, is a leading cause of nitrous oxide emissions from agriculture, contributing significantly to global warming.	Surender needs to deal with many problems, including how to: Cope with climate change, soil erosion and biodiversity loss.  Meet rising demand for more food of higher quality.

<b>Who does the problem affect?</b>	Persons who do Agriculture.
<b>What are the boundaries of the problem?</b>	People who Grow Crops and facing Issues of Plant Disease.
<b>What is the issue?</b>	In Agricultural aspects, if the plant is affected by leaf disease, then it reduces the growth and productiveness. Generally, the plant diseases are caused by the abnormal physiological functionalities of plants.
<b>When does the issue occur?</b>	During the development of the crops as they will be affected by various diseases.
<b>Where does the issue occur?</b>	The issue occurs in agriculture practicing areas, particularly in rural regions.
<b>Why is it important that we fix the problem?</b>	It is required for the growth of better-quality food products. It is important to maximise the crop yield.
<b>What solution to solve this issue?</b>	An Automated system is introduced to identify different diseases on plants by checking the symptoms shown on the leaves of the plant.
<b>What methodology used to solve the issue?</b>	Deep learning techniques are used to identify the diseases and suggest the precautions that can be taken for those diseases.