

Ideation Phase

Define the Problem Statements

Date	15 April 2025
Team ID	SWTID1743500346
Project Name	Farm-Ease: Revolutionizing Agriculture with Technology
Maximum Marks	2 Marks

Defining the Problem:-

Today's farmers are operating in an ever-more complicated, unpredictable, and information-intensive environment. However, the instruments at their use continue to be old-fashioned, disparate, or out of reach. Some of the fundamental challenges are:

- **Unpredictable Weather Patterns:** Sudden temperature fluctuations, unusual rains, or extended droughts tend to devastate crops. Inadequate forecasting tools render farmers helpless and unaware.
- **Pest Infestation:** Pests continue to be one of the leading causes of crop loss. Farmers tend to act on guesswork or late responses, leading to ineffective measures.
- **Limited Resource Management:** Without access to credible information regarding soil health, water, and nutrient needs, resource management becomes inefficient, wasteful, and costly.
- **Market Accessibility Issues:** Farmers are unable to receive a fair price for their produce because of middlemen and the absence of direct market access.
- **Digital Divide:** There are technological solutions but they are not accessible to small-scale farmers because of the absence of awareness, language differences, or overly complicated interfaces.

These issues indicate the necessity for an integrated, intelligent, and intuitive system specifically designed for on-ground realities and grassroots requirements

Problem Statement :-

Farming in India continues to face major challenges like unpredictable weather, pest outbreaks, and lack of access to real-time information. Most farmers rely on traditional methods, with limited support from technology or expert guidance, resulting in lower productivity and unstable income.

FarmEase Project Overview Table :-

Section	Details
problem	Farmers face issues like unpredictable weather, pest outbreaks, low yields, and limited access to expert advice or market data. Most rely on outdated practices due to lack of tech exposure.
Solution	A digital platform providing real-time weather updates, crop recommendations, pest/disease diagnosis, mandi price tracking, and expert consultation through a user-friendly, multilingual interface.
Core Features	<ul style="list-style-type: none">- Weather Forecasting- Crop Suggestion System- Pest Detection- Market Price Updates- Expert Advice & Community Forum
Target Users	Farmers (especially in rural/semi-urban areas), agri-entrepreneurs, agri-consultants
Impact	<ul style="list-style-type: none">- Empowers farmers with data-driven decisions- Increases productivity and income- Encourages sustainable farming- Builds a tech-inclusive farming community