

# Use Case Tables

## 1. Register

Field	Description
Name	Register
Actor	Farmer / Agriculture Engineer
Goal	Create a new account
Pre-condition	User is not registered
Post-condition	Account is created and user can login
Main Flow	Enter data → System validates → Account created
Alternative	Email already exists → Show error

## 2. Login

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	Access the system
Pre-condition	User has an existing account
Post-condition	User enters dashboard
Main Flow	Enter email & password → Login
Exception	Incorrect password

## 3. Logout

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	Exit the system
Pre-condition	User is logged in
Post-condition	User returns to home page
Main Flow	Click Logout

## 4. Add Farm

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	Add a new farm
Pre-condition	User is logged in
Post-condition	Farm is added
Main Flow	Enter farm data → Save
Extension	View Farm

## 5. View Farm

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	View farm details
Pre-condition	Farm exists
Post-condition	Details displayed
Main Flow	Click View Farm
Extensions	Add schedule / Add plant / Update farm / Delete farm

## 6. Update Farm

Field	Description
Actor	Farmer
Goal	Modify farm data
Pre-condition	Farm exists
Post-condition	Farm updated
Main Flow	View Farm → Edit → Save

## 7. Delete Farm

Field	Description
Actor	Farmer
Goal	Remove a farm
Pre-condition	Farm exists
Post-condition	Farm deleted
Main Flow	View farm → Delete

## 8. Add Schedule Plan

Field	Description
Actor	Farmer
Goal	Add planting schedule
Pre-condition	Farm exists
Post-condition	Schedule added
Main Flow	View farm / Add Yearly plants / Add fertilizers / Add planting dates

## 9. Add Plant

Field	Description
Actor	Farmer
Goal	Add a plant
Pre-condition	Farm exists
Post-condition	Plant added to farm
Main Flow	View farm -> Select plant -> Click Add Plant

## 10. Delete Plant

Field	Description
Actor	Farmer
Goal	Delete a plant
Pre-condition	Plant exists
Post-condition	Plant removed
Main Flow	Click Delete Plant

## 11. Upload Photo

Field	Description
Actor	Farmer
Goal	Upload plant image
Pre-condition	Plant exists
Post-condition	Image uploaded -> response by report
Main Flow	Select image → Upload
Include	View Report

## 12. View Report

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	View analysis report
Pre-condition	Uploaded image available
Post-condition	Report displayed
Include	Pest Detection API, Disease Detection API

## 13. Pest Detection API – Give Report

Field	Description
Actor	Pest Detection API
Goal	Detect pests from image
Pre-condition	Image received
Post-condition	Report returned
Main Flow	Analyze image → Return data

## 14. Disease Detection API – Give Report

Field	Description
Actor	Disease Detection API
Goal	Detect diseases in plant
Pre-condition	Image received
Post-condition	Report returned
Main Flow	Analyze → Return output

## 15. Treatment Recommendation API – Give Treatment

Field	Description
Actor	Treatment Recommendation API
Goal	Provide treatment recommendation
Pre-condition	Disease report available
Post-condition	Treatment shown
Main Flow	Generate recommendation → Return

## 16. Ask Questions

Field	Description
Actor	Farmer
Goal	Ask chatbot questions
Pre-condition	User logged in
Post-condition	Question sent
Main Flow	Enter question → Send
Include	Chatbot API – Give answers

## 17. Chat (Farmer ↔ Engineer)

Field	Description
Actors	Farmer & Agriculture Engineer
Goal	Direct communication
Pre-condition	Access granted
Main Flow	Send/receive messages

## 18. Give Access to Farm

Field	Description
Actor	Farmer
Goal	Allow engineer to view farm
Pre-condition	Engineer exists
Post-condition	Engineer gains access
Main Flow	Select engineer → Give access

## 19. Add Blog

Field	Description
Actor	Agriculture Engineer
Goal	Publish article
Pre-condition	Logged in
Post-condition	Blog published
Main Flow	Write → Post

## 20. View Blog

Field	Description
Actor	Farmer
Goal	View blog posts
Main Flow	Open blogs page

## 21. Weather Prediction Replay

Field	Description
Actor	Weather API
Goal	Send weather prediction
Include	Plant Recommendation

## 22. Give Plant Recommendation

Field	Description
Actor	Plant Recommendation API
Goal	Suggest suitable plants
Pre-condition	Weather data available
Post-condition	Recommendation returned
Main Flow	Analyze → Output