

# MTFC Scenario Quest Response 2025-26

Team Name	
Team ID #	

## MTFC Scenario Quest Template Use Notes:

- Refer to the official MTFC Scenario Quest 2025-26 for the 30 prompts and scoring instructions.
- The use of this template is OPTIONAL.
  - It is provided as an optional resource for teams to keep their Scenario Quest response organized. Teams who wish to use this template should make a copy in order to edit.
- The final version of the team's MTFC Scenario Quest Response should be downloaded as a PDF or Word document to submit on the ICS Dashboard. A single file will be submitted.
- Additional resources (including the Actuarial Process Guide) can be found on the Modeling the Future Challenge website: <https://www.mtfchallenge.org/resources/>
- Please direct any questions to [challenge@mtfchallenge.org](mailto:challenge@mtfchallenge.org).

## Part 1: Project Definition (*Corn Farming Topic Prompts*)

These prompts can be found on page 6 of the 2025-26 Scenario Quest. Additional information on Project Definition can be found in **Step 1: Project Definition** in the Actuarial Process Guide.

Team Responses:

### #1: Who is at risk?

- Response:

### #2: Defining the risks

- Response:

### #3: Identify Risk mitigation strategies

- Response:

## Part 2: Data Identification & Assessment (Corn Farming Topic Prompts)

These prompts can be found on pages 7-9 of the 2025-26 Scenario Quest. Additional information on Data Identification and Assessment can be found in **Step 2: Data Identification & Assessment** in the Actuarial Process Guide.

Team Responses:

### #4: Identifying the type of data

- Response:

### #5: Planting Costs for Farmer Jones

- Response:

### #6: Assumed yield for Farmer Jones

- Response:

### #7: Anticipated total planting costs

- Response:

### #8: Range for anticipated costs

- Response:

### #9: Harvest Expectations for Farmer Jones

- Response:

### #10: corn sale prices expectations

- Response:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

### #12: Harvest Expectations with October sale

- Response:

### #13: Harvest expectations with optimal sale

- Response:

### #14: Creation of a data visual.

- Response:

### #15: Top causes of loss & their impacts

- Response:

## Part 3: Mathematical Modeling (Corn Farming Topic Prompts)

These prompts can be found on page 10-11 of the 2025-26 Scenario Quest. Additional information on Mathematical Modeling can be found in **Step 3: Mathematical Modeling** in the Actuarial Process Guide.

Team Responses:

### #16: Linear regression

- Response:

### #17: Cause of loss trends or patterns

- Response:

### #18: Assumption evaluation

- Response:

### #19: Assumption development

- Response:

### #20: Frequency of claims due to drought

- Response:

### #21: Expected value of loss due to drought

- Response:

### #22: Average annual insurance payout due to drought

- Response:

## Part 4: Risk Analysis (*Corn Farming Topic Prompts*)

These prompts can be found on page 12-13 of the 2025-26 Scenario Quest. Additional information on conducting a Risk Analysis can be found in **Step 4: Risk Analysis** in the Actuarial Process Guide.

Team Responses:

### #23: Risk mitigation strategy: Grain Silo

- Response:

### #24: Risk mitigation Strategy: irrigation system

- Response:

### #25: Characterizing the crop insurance scenario

- Response:

### #26: Value of the insurance policy

- Response:

## Part 5: Recommendations (Corn Farming Topic Prompts)

These prompts can be found on page 14 of the 2025-26 Scenario Quest. Additional information on making Recommendations can be found in **Step 5: Recommendations** in the Actuarial Process Guide.

Team Responses:

### #27: Irrigation system impact

- Response:

### #28: Comparison of expected value of loss

- Response:

### #29: Profit trajectory with irrigation

- Response:

### #30: Should the irrigation system be recommended?

- Response: