

ASSUMPTIONS OF THE ER DIAGRAM

1. Farmer Location Assumption

- Each farmer belongs to **one location** (district/sector).
 - Weather advisories are generated **based on the farmer's location**.
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2. Weather Data Assumption

- Weather readings are collected **daily**.
 - Each **location has one weather record per day**, but the system may store multiple readings if needed.
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3. Crop Requirement Assumption

- ◆ Each crop has **ideal weather ranges** (temperature, rainfall, humidity).
 - ◆ These ranges are used to evaluate whether the weather is **GOOD / MODERATE / BAD** for that crop.
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4. Advisory Generation Assumption

An advisory is generated whenever:

- ❖ New weather data is inserted,
 - ❖ Compare weather with crop requirements,
 - ❖ Identify farmers in the same location.
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5. Communication Assumption

- Farmers receive advisories through **SMS or a mobile application**.
 - The system assumes the phone number is valid.
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6. System Automation Assumption

- ✓ The whole advisory generation process is **automatic and scheduled**.
- ✓ No manual intervention is required for daily advisories.

7. Referential Integrity Assumption

- ✓ A farmer must exist before an advisory referencing them can be created.
 - ✓ A crop must exist before crop requirements are created.
 - ✓ A weather record must exist before generating any advisory.
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8. Season Assumption

- ✧ Some crops are seasonal (Season A, B, or C).
- ✧ Season information is used only for classification, **not for joining tables**.