# "Harvesting Insights: A 57-Year Odyssey of Indian Agriculture and Climate Interplay"

# **Datasets Description**

# 1. Crops Dataset

This dataset includes separate files for various crops (e.g., sugarcane, rice, wheat, apples, etc.).

# **Key Points:**

• Time Period: 1961 to 2018.

• Details for Each Crop:

o **Area Harvested**: Total land used for growing the crop.

o **Yield**: How much of the crop is produced per unit area.

Production: Total amount of the crop produced.

• Format: Each crop is stored in a separate file, but all files have the same columns.

#### 2. Rainfall Dataset

This dataset contains rainfall data for India.

# **Key Points:**

Time Period: 1961 to 2018.

• Details:

- o Monthly rainfall (e.g., January to December).
- Annual total rainfall.
- Seasonal rainfall:
  - Jan-Feb: Rainfall in January and February.
  - Mar-May: Pre-monsoon season.
  - Jun-Sep: Monsoon season.
  - Oct-Dec: Post-monsoon season.
- **Purpose**: Analyze how rainfall patterns have changed over time and their impact on agriculture.

# 3. Temperature Dataset

This dataset includes annual and seasonal temperature data for India.

# **Key Points:**

• **Time Period**: 1961 to 2018.

• Details:

o **Annual**: Average temperature for the whole year.

o Jan-Feb: Average temperature in January and February.

o **Mar-May**: Pre-monsoon season.

o **Jun-Sep**: Monsoon season.

Oct-Dec: Post-monsoon season.

• **Purpose**: Analyze temperature trends over time and study their effects on crop yields and rainfall.

# **Overall Purpose:**

These datasets together allow us to study how agriculture (crop yields, production) in India is affected by climatic factors (rainfall, temperature) over nearly six decades.