Global Food Production Trends and Analysis (1961–2023) Using Power BI

# Introduction

This project presents a detailed analysis of global food production trends between 1961 and 2023, focusing on commodities such as rice, wheat, tea, and maize. Power BI was used to build interactive dashboards to visualize production trends, identify major contributors, and derive strategic insights.

# Objectives

- Analyze year-wise production trends.  
- Compare production volumes across major commodities.  
- Identify top contributing regions/entities.  
- Build interactive Power BI dashboards.

# Tools Used

• Power BI  
• Microsoft Excel  
• Power Query  
• DAX (Data Analysis Expressions)  
• FAOSTAT / Kaggle data

# Dataset Overview

The dataset contains yearly global production data from 1961 to 2023 for four major crops: Rice, Wheat, Tea, and Maize. Each entry includes Year, Commodity, Entity (Global), and Production Volume in tonnes.

# Visualizations & Insights

• Area Chart: Year-wise trends for Wheat, Maize, and Rice  
• Gauge Chart: Total Tea Production  
• Bar Chart: Green Coffee by Region (optional extension)  
• Donut Chart: Maize Production Distribution  
• Stacked Column Chart: Fruit Production Comparison (Grapes, Apples, Bananas, Oranges)

# Conclusion

The project reveals significant growth in wheat and maize production since the 1980s, while tea production has remained relatively stable. Power BI facilitated a deep exploration of trends, enabling data-driven insights for agricultural strategy and planning.

# Appendix

Dataset: Food\_Production\_1961\_2023.xlsx