

Data Visualization

Project Title: Global Food Production Trends and Analysis (1961–2023)

Framing Business Questions

The purpose of visualization is not just to present data, but to **answer specific business and analytical questions** about global food production. For this project, the following guiding questions were framed:

Global-Level Questions

- Which commodities dominate global food production volumes between 1961–2023?
- How has global production of high-volume crops (e.g., Sugarcane, Cereals) evolved over time?
- What percentage share do different commodity categories (Cereals, Fruits, Oilseeds, etc.) contribute to total food output?

Commodity-Level Questions

- Which countries are the leading producers of specific commodities (e.g., Coffee, Tea, Cocoa)?
- How do production trends differ across cash crops vs. staple crops?
- What are the top commodities in terms of consistent year-on-year growth?

Country/Region-Level Questions

- Which entities contribute the most to global food production?
- How do regions differ in their specialization (e.g., Asia in Rice, South America in Coffee)?
- How do country-level production patterns shift across decades (1960s vs. 2020s)?

Strategic/Analytical Questions

- Which commodities show long-term upward vs. stagnant growth trends?
- Are there visible patterns of diversification in global food production?
- How can policymakers or agribusinesses identify opportunities for food security and trade from these insights?

These questions acted as the **blueprint** for designing the dashboards and selecting the appropriate visualization techniques in Power BI.