

Power BI Report: Global Food Production Analysis (1961–2023)

Objective:

To analyze the global trends in food production across various categories such as rice, wheat, maize, coffee, tea, and fruits from **1961 to 2023**, categorized by country (entity) and year.

Dataset Description:

Columns in the dataset:

Column Name	Description
Entity	Country or region where food production is recorded
Code	Unique identifier for each entity
Year	Year of record (from 1961 to 2023)
Apples_Production (tonnes)	Annual apple production
Avocados_Production (tonnes)	Annual avocado production
Bananas_Production (tonnes)	Annual banana production
Coffee_green_Production (tonnes)	Annual green coffee production
Grapes_Production (tonnes)	Annual grape production
Maize_Production (tonnes)	Annual maize production
Oranges_Production (tonnes)	Annual orange production
Rice_Production (tonnes)	Annual rice production
Tea_Production (tonnes)	Annual tea production
Wheat_Production (tonnes)	Annual wheat production

Key Visuals and Insights:

Dashboard 1: Summary View (1961–2023)

- **269bn tonnes** – Total **rice** production globally
- **282bn tonnes** – Total **wheat** production globally
- **2bn tonnes** – Total **tea** production globally
- **Top coffee producers:** Africa, followed by America and Asia

- **Line chart:** Shows **wheat, maize, and rice** production trends steadily increasing over time.
- **Donut chart:** Distribution of maize production across years.



Dashboard 2: Fruit Production Comparison

- **Grapes:** 43bn tonnes – highest among fruits
- **Apples:** 39bn tonnes
- **Bananas:** 32bn tonnes
- **Oranges:** 26bn tonnes



Additional Visuals:

- **Bar charts** comparing food categories across countries/entities
- **Time series** showing growth patterns in food production
- **KPI cards** highlighting total quantities

Report Summary:

- **Wheat, maize, and rice** have shown a **steady growth** trend over the decades, with wheat showing the **highest increase**.
- **Africa, America, and Asia** lead in **green coffee** production
- Fruits like **apples, bananas, oranges**, and **grapes** are **produced widely**, with top outputs from **Europe and Asia**.
- **Maize production** shows consistent growth with notable **jumps in the late 1980s and early 2000s**.
- **Tea** production remains comparatively smaller (2bn tonnes), though steady.

Tools Used:

- **Power BI Desktop**
- Data modeling using CSV format
- Visualizations: Bar charts, Line charts, Donut charts, Cards, Gauge



Suggested Improvements:

- Add slicers for year and region filtering
- Include forecast visuals for next decade
- Integrate population or consumption per capita for deeper insight

Final Output

