# Report

Date	30 July 2025
Team ID	XXXXXX
Project Name	Global Food Production Trends and Analysis using Power BI
Maximum Marks	5 Marks

A report is a comprehensive document that provides a detailed and structured account of data analysis, findings, and insights. It is typically used for in-depth analysis, documentation, and communication of results. Reports are suitable for a diverse audience, including decision-makers, analysts, and stakeholders who need a comprehensive understanding of the data.

Designing a report in Power BI involves connecting to data sources, creating visualizations like charts and graphs, customizing their appearance and interactivity, organizing them logically on the canvas, formatting elements for consistency and clarity, and optionally creating dashboards for a summarized view. Throughout the process, it's essential to consider the audience's needs and ensure the report effectively communicates insights from the data. Finally, iterate based on feedback to continually improve the report's design and usefulness.

# GLOBAL FOOD PRODUCTION ANALYSIS REPORT

- The total rice production globally from 1961 to 2023 is 269 billion tonnes.
- The total wheat production globally from 1961 to 2023 is 282 billion tonnes.
- The total tea production globally from 1961 to 2023 is 2 billion
- · Africa, America, and Asia lead in the production of green coffee with Africa being the top producer followed by America.
- Wheat, maize and rice production have all shown a steady increase from 1961 to 2023, with wheat production showing the most significance rise over the years.
- Apples, avocados, bananas and oranges are produced in varying quantities by different entities, with countries like Europe and Asia showing significant production volumes.
- Maize production has consistently increased over the years, with notable jumps around the late 1980s and continuing into the 2000s.
- Grapes have the highest total production at 43 billion tonnes, followed by apples (39 billion tonnes), bananas (32 billion tonnes),
- tollowed by apples (39 billion tonnes), bananas (32 billion tonn and oranges (26 billion tonnes).

Sum of Grapes Production, Apples Production, Bananas
Production and Oranges Production (tonnes)

100%

Sum of Grapes P...

Sum of Apples Pr...

Sum of Bananas ...

32bn

Sum of Oranges ...

60.1%

## **Observations from Power BI Reports**

#### 1. Trends Over Time:

- The stacked area chart reveals **consistent growth in Wheat and Maize production**, especially after 1990.
- **Rice production**, while stable, shows **milder growth**, indicating slower expansion in some regions.
- **Maize production peaked in recent years**, particularly around 2021, suggesting global reliance on this crop is rising.

## 2. Performance Comparisons:

- **Wheat leads global crop production** with 282bn tonnes, followed by Rice at 269bn tonnes.
- **Grapes (43bn tonnes)** and **Apples (39bn tonnes)** dominate fruit production, significantly outpacing Bananas and Oranges.
- The bar chart and ribbon chart highlight **country-level leaders**, with African and Asian countries appearing prominently in Coffee and Fruit production.

### 3. Regional Contributions & Crop Segmentation:

- Entities like **Micronesia**, **Maldives**, and **Africa** (**FAO-defined**) show distinct leadership in Coffee production.
- Countries such as **Argentina**, **China**, **and São Tomé** spike in different fruits like Bananas, Apples, and Oranges.
- **Crop diversity** across nations suggests opportunities for targeted agricultural investment based on strengths.

#### 4. Goal Achievement:

- KPI cards indicate **milestone achievements** in key food categories:
  - Wheat crossed 282bn tonnes
  - Rice surpassed 269bn tonnes
  - Tea production reached 2bn tonnes, nearing its upper band
- These indicators demonstrate **steady progress in global food output** and can benchmark sustainability or food security targets.