

Business Question and Visualization Report

Date	25 - 12- 25
Team ID	
Project Name	Global Food Production Analysis (1961–2023)
Maximum Marks	5 Marks

Visualization development refers to the process of creating graphical representations of data to facilitate understanding, analysis, and decision-making. The goal is to transform complex datasets into visual formats that are easy to interpret, enabling users to gain insights and make informed decisions. Visualization development involves selecting appropriate visual elements, designing layouts, and using interactive features to enhance the user experience. This process is commonly associated with data visualization tools and platforms, and it plays a crucial role in business intelligence, analytics, and reporting.

Business Questions and Visualisation

The process involves defining specific business questions to guide the creation of meaningful and actionable visualizations in Power BI. Well-framed questions help in identifying key metrics, selecting relevant data, and building visualisation that provide insights.

1. What is the total global rice production from 1961 to 2023?

- **Visualization:** Card visual displaying total rice production (in tonnes)
- **Insight:** Highlights the importance of rice as a global staple crop

2. What is the total global wheat production over the years?

- **Visualization:** Card visual showing total wheat production
- **Insight:** Shows wheat as one of the most produced food crops worldwide

3. How has wheat, maize, and rice production changed over time?

- **Visualization:** Area chart comparing wheat, maize, and rice production by year
- **Insight:** Identifies long-term growth trends and fluctuations among major cereal crops

4. Which regions contribute the most to green coffee production?

- **Visualization:** Bar chart showing green coffee production by entity
- **Insight:** Africa emerges as a leading producer of green coffee

5. How has maize production evolved across different years?

- **Visualization:** Donut chart showing maize production distribution by year
- **Insight:** Highlights steady growth in maize production, especially after the 1980s

6. Which regions produce the highest quantities of apples, avocados, bananas, and oranges?

- **Visualization:** Stacked bar chart of fruit production by entity
- **Insight:** Europe and Asia are major contributors to global fruit production

7. Which fruit has the highest total production globally?

- **Visualization:** Bar chart comparing grapes, apples, bananas, and oranges
- **Insight:** Grapes have the highest production, followed by apples and bananas

8. How does tea production compare with other major food crops?

- **Visualization:** Gauge chart showing total tea production
- **Insight:** Provides a comparative view of tea production against staple crops

Conclusion

The business questions and corresponding visualizations provide a clear understanding of global food production trends. By leveraging Power BI's interactive features, this project enables effective analysis of crop performance, regional contributions, and long-term agricultural patterns, supporting informed decision-making.