

Dashboard Design

Date	25-12-2025
Team ID	
Project Name	Global Food Production Analysis (1961–2023)
Maximum Marks	5 Marks

Creating an effective dashboard requires thoughtful design to ensure that information is clear, relevant, and easy to understand for users. The dashboard developed for this project focuses on presenting global food production insights in an interactive, visually appealing, and user-friendly manner using Power BI. It enables stakeholders to explore trends, compare crops, and analyze regional contributions efficiently.

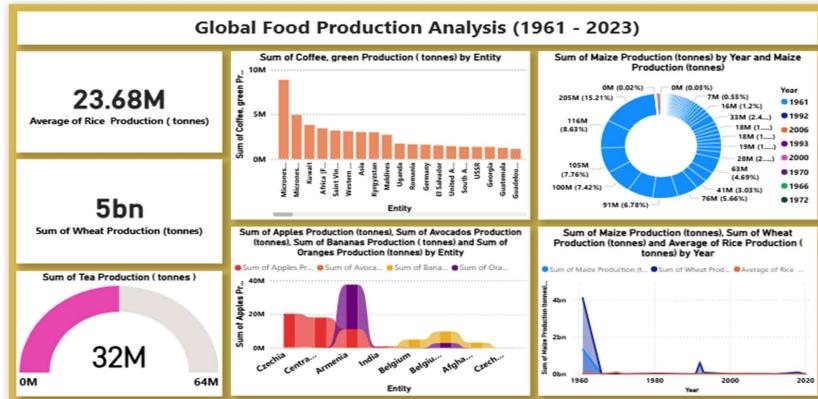
Activity 1: Interactive and visually appealing dashboards

The dashboard was designed by following best practices to ensure clarity, usability, and interactivity. The following design principles were carefully implemented:

Design Principles Applied

- Clear and Intuitive Layout:**
The dashboard follows a logical structure with key KPIs placed at the top, trend visualizations in the center, and detailed comparisons at the bottom.
- Use of Appropriate Visualizations:**
Cards, bar charts, area charts, donut charts, and gauge charts were selected based on the nature of the data and the business questions.
- Colour and Theming:**
A consistent and professional color theme was applied to differentiate crop categories such as cereals, fruits, and beverages while maintaining visual harmony.
- Interactive Filters and Slicers:**
Slicers for year, crop type, and region allow users to dynamically filter data and view customized insights.
- Drill-Down Capabilities:**
Drill-down features enable users to move from high-level summaries to detailed views such as yearly or region-wise production.
- Responsive Design:**
The dashboard layout adapts well to different screen sizes, ensuring readability and usability across devices.

- Custom Visuals and Icons:**
Icons and visual indicators were used to enhance understanding and improve the overall look and feel of the dashboard.
- Use of Infographics:**
Infographic-style visuals such as KPIs and comparative charts were included to summarize key metrics effectively.



Major Outcomes from the Dashboard

- Total Crop Production Insights:**
The dashboard highlights total global production of major crops such as rice, wheat, maize, fruits, tea, and coffee.
- Trend Analysis Over Time:**
Area and line charts clearly show long-term growth trends, with wheat demonstrating the most significant increase.
- Regional Contribution Analysis:**
Bar and stacked bar charts identify major producing regions, with Europe and Asia leading in fruit production and Africa in green coffee.
- Crop Comparison:**
Comparative visuals show that grapes have the highest total production among fruits, followed by apples, bananas, and oranges.
- Interactive Decision Support:**
Filters and drill-down options allow users to explore specific years, crops, and regions, supporting data-driven decision-making.