

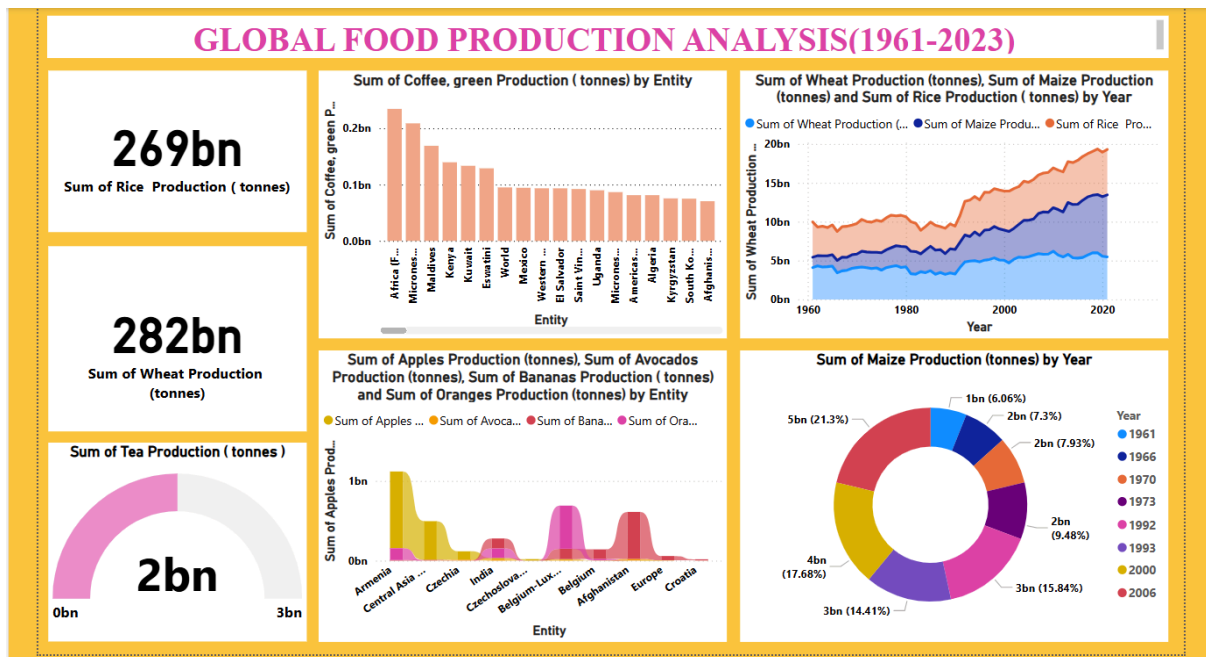
Dashboard Design

Date	3 July 2025
SkillWallet ID	SWUID20250170810
Project Name	Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 Using Power BI
Maximum Marks	5 Marks

Creating an effective and user-friendly dashboard involved the implementation of key design principles and interactivity best practices:

Design Considerations & Features Used:

1. Clear and Intuitive Layout
 - KPIs are aligned vertically on the left for quick access (Rice, Wheat, Tea production).
 - Analytical and comparative visuals are grouped in the center and right for better flow.
2. Use of Appropriate Visualizations
 - KPI Cards: Total production of rice and wheat.
 - Gauge Chart: Tea production indicator.
 - Stacked Area Chart: Wheat, maize, and rice trends over time.
 - Bar Chart: Green coffee production by region.
 - Ribbon Chart: Regional fruit comparisons.
 - Donut Chart: Maize production over selected years.
 - 100% Stacked Bar Chart: Total fruit production comparison.
3. Colour and Theming
 - Warm and contrasting colors for clarity and segmentation.
 - Consistent palette per crop type (e.g., blue for wheat, red for rice).
4. Interactive Filters and Slicers
 - Year, crop, and entity filters available (via slicers or dropdowns).
5. Drill-Down Capabilities
 - Year-wise and region-wise drill-down options for deep analysis.
6. Responsive Design
 - Elements adapt well to different screen sizes in Power BI Service.
7. Custom Visuals and Icons
 - Icons and custom visuals used for tea gauge, fruit comparison, and maize production.
8. Use of Infographics
 - Bottom section includes a visually thematic infographic with global food icons.



Key Outcomes from the Dashboard:

- Total Rice Production: 269 billion tonnes globally between 1961–2023.
- Total Wheat Production: 282 billion tonnes over the same period.
- Tea Production: 2 billion tonnes globally, visualized via a gauge chart.
- Top Coffee Producers: Africa leads green coffee production, followed by America and Asia.
- Grain Trends Over Time: Wheat shows the most significant production growth, followed by maize and rice.
- Fruit Production by Entity: Europe and Asia dominate in apples, bananas, oranges, and avocados.
- Maize Production by Year: Notable increases in the late 1980s–2000s (shown in a donut chart).
- Top Fruits by Volume: Grapes rank highest at 43 billion tonnes, followed by apples (39bn), bananas (32bn), and oranges (26bn).