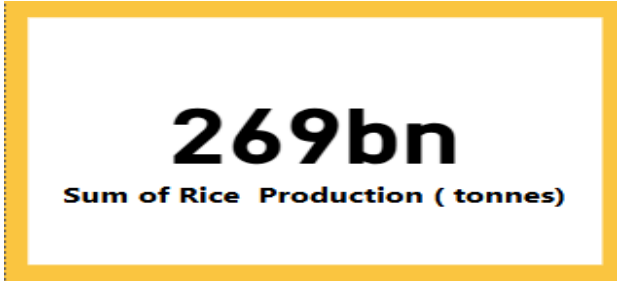

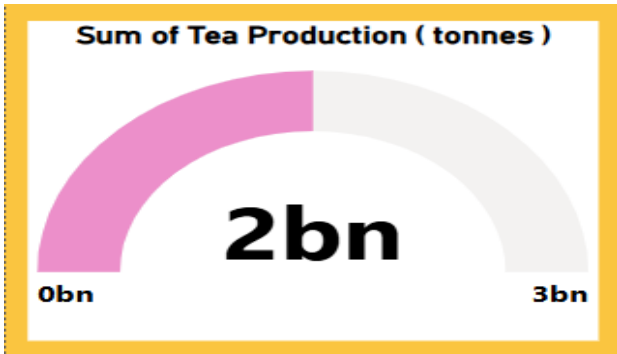
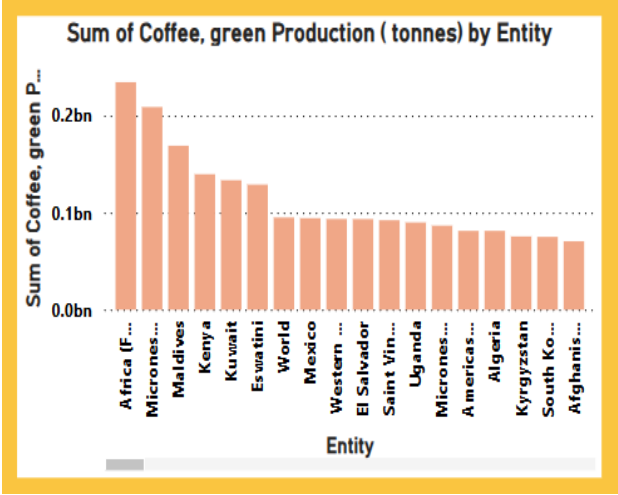
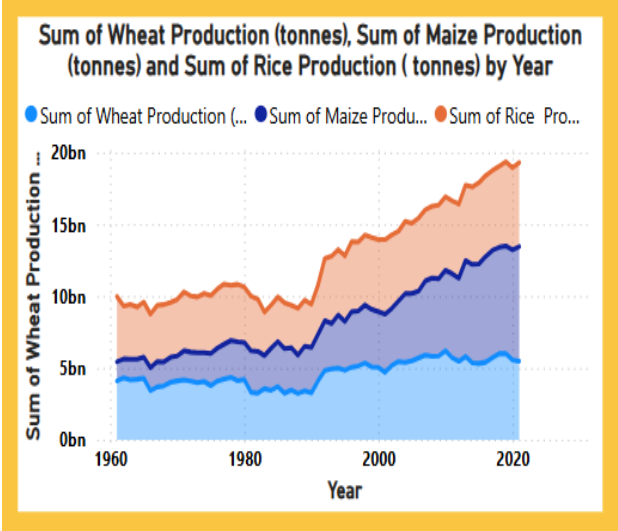


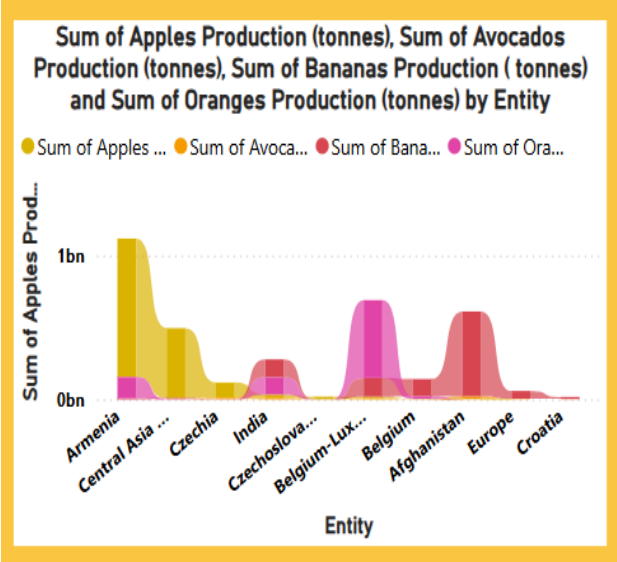
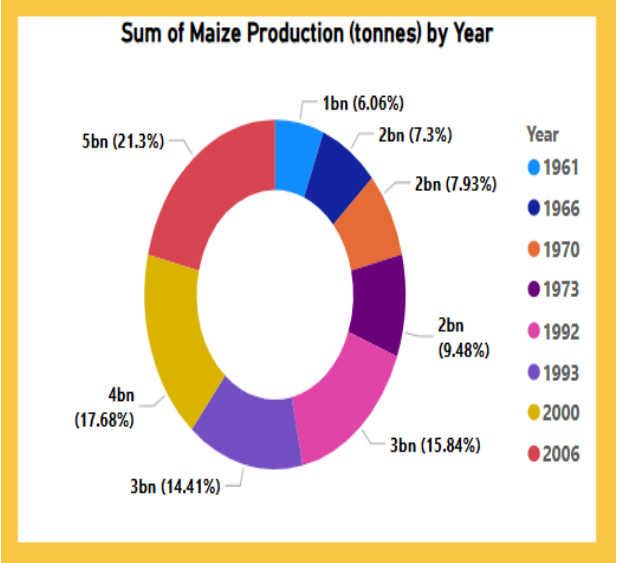
Business Question and Visualization Report

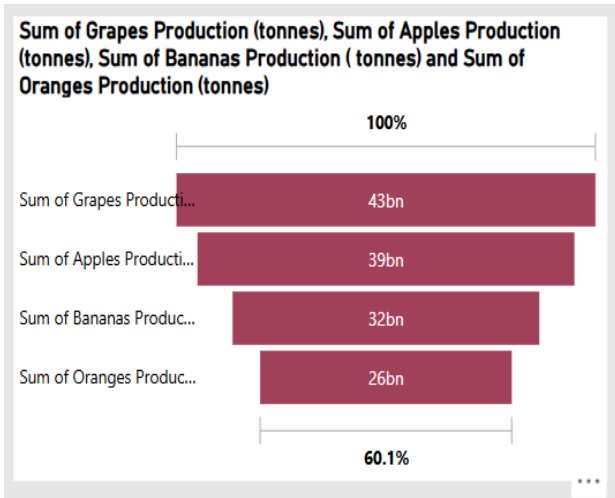
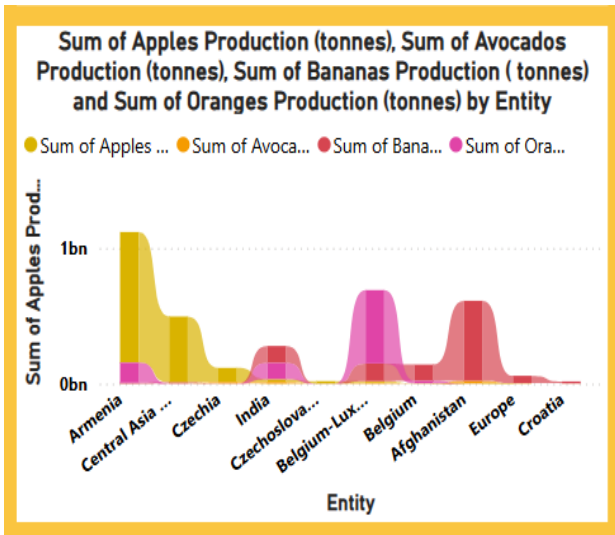
Date	2 July 2025
SkillWallet ID	SWUID20250170810
Project Name	Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 Using Power BI
Maximum Marks	5 Marks

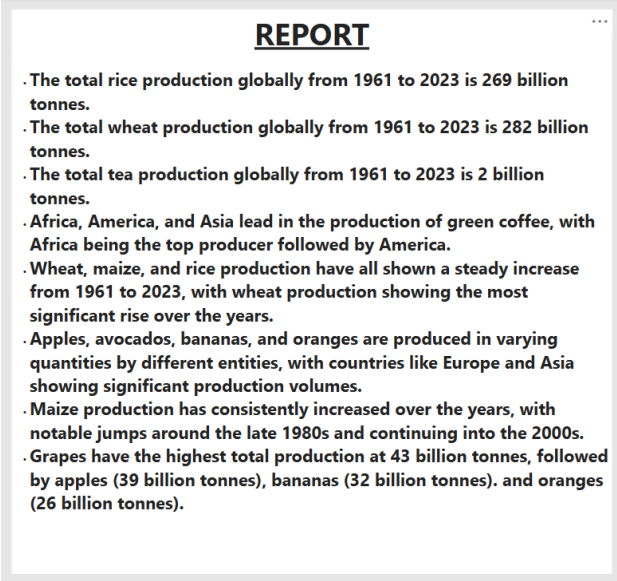
4.2. Developing Visualizations:

Business Question	Power BI Visualisation Used	Screenshot
Total production of rice, wheat, and tea (1961–2023)	KPI cards for Rice (269bn), Wheat (282bn), Tea (2bn)	 <p>A KPI card with a yellow border. It displays the value '269bn' in large black font, with the text 'Sum of Rice Production (tonnes)' below it.</p>
		 <p>A KPI card with a yellow border. It displays the value '282bn' in large black font, with the text 'Sum of Wheat Production (tonnes)' below it.</p>
		 <p>A KPI card with a yellow border. It features a gauge chart with a pink arc from 0bn to 2bn and a grey arc from 2bn to 3bn. The value '2bn' is displayed in large black font, with the text 'Sum of Tea Production (tonnes)' above it.</p>

Business Question	Power BI Visualisation Used	Screenshot
Top green coffee producing regions	Vertical Bar Chart (Entities on X-axis, coffee production on Y-axis)	 <p>Sum of Coffee, green Production (tonnes) by Entity</p>
Annual trend of wheat, maize, and rice production	Area Chart (stacked by crop, year on X-axis)	 <p>Sum of Wheat Production (tonnes), Sum of Maize Production (tonnes) and Sum of Rice Production (tonnes) by Year</p>

Business Question	Power BI Visualisation Used	Screenshot																											
Apples, Bananas, Avocados, Oranges by Entity	Ribbon Chart by region/entity	 <p>Sum of Apples Production (tonnes), Sum of Avocados Production (tonnes), Sum of Bananas Production (tonnes) and Sum of Oranges Production (tonnes) by Entity</p> <p>Legend: Sum of Apples ... (Yellow), Sum of Avoca... (Orange), Sum of Bana... (Red), Sum of Ora... (Pink)</p> <p>Y-axis: Sum of Apples Prod... (0bn to 1bn)</p> <p>X-axis: Entity (Armenia, Central Asia ..., Czechia, India, Czechoslova..., Belgium-Lux..., Belgium, Afghanistan, Europe, Croatia)</p>																											
Year-wise maize production milestones	Donut Chart with % share from selected years	 <p>Sum of Maize Production (tonnes) by Year</p> <p>Legend: Year (1961, 1966, 1970, 1973, 1992, 1993, 2000, 2006)</p> <p>Production Data:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Production (tonnes)</th> <th>% Share</th> </tr> </thead> <tbody> <tr> <td>1961</td> <td>1bn</td> <td>6.06%</td> </tr> <tr> <td>1966</td> <td>2bn</td> <td>7.3%</td> </tr> <tr> <td>1970</td> <td>2bn</td> <td>7.93%</td> </tr> <tr> <td>1973</td> <td>2bn</td> <td>9.48%</td> </tr> <tr> <td>1992</td> <td>3bn</td> <td>15.84%</td> </tr> <tr> <td>1993</td> <td>3bn</td> <td>14.41%</td> </tr> <tr> <td>2000</td> <td>4bn</td> <td>17.68%</td> </tr> <tr> <td>2006</td> <td>5bn</td> <td>21.3%</td> </tr> </tbody> </table>	Year	Production (tonnes)	% Share	1961	1bn	6.06%	1966	2bn	7.3%	1970	2bn	7.93%	1973	2bn	9.48%	1992	3bn	15.84%	1993	3bn	14.41%	2000	4bn	17.68%	2006	5bn	21.3%
Year	Production (tonnes)	% Share																											
1961	1bn	6.06%																											
1966	2bn	7.3%																											
1970	2bn	7.93%																											
1973	2bn	9.48%																											
1992	3bn	15.84%																											
1993	3bn	14.41%																											
2000	4bn	17.68%																											
2006	5bn	21.3%																											

Business Question	Power BI Visualisation Used	Screenshot																																																							
Total production comparison of grapes, apples, bananas, oranges	Horizontal Bar Chart with quantity labels	<div><p>Sum of Grapes Production (tonnes), Sum of Apples Production (tonnes), Sum of Bananas Production (tonnes) and Sum of Oranges Production (tonnes)</p><table><thead><tr><th>Category</th><th>Production (bn)</th></tr></thead><tbody><tr><td>Sum of Grapes Production</td><td>43bn</td></tr><tr><td>Sum of Apples Production</td><td>39bn</td></tr><tr><td>Sum of Bananas Production</td><td>32bn</td></tr><tr><td>Sum of Oranges Production</td><td>26bn</td></tr></tbody></table></div>	Category	Production (bn)	Sum of Grapes Production	43bn	Sum of Apples Production	39bn	Sum of Bananas Production	32bn	Sum of Oranges Production	26bn																																													
Category	Production (bn)																																																								
Sum of Grapes Production	43bn																																																								
Sum of Apples Production	39bn																																																								
Sum of Bananas Production	32bn																																																								
Sum of Oranges Production	26bn																																																								
Regional leaders in fruit production	Category-wise comparison of region-specific entities	<div><p>Sum of Apples Production (tonnes), Sum of Avocados Production (tonnes), Sum of Bananas Production (tonnes) and Sum of Oranges Production (tonnes) by Entity</p><p>● Sum of Apples ... ● Sum of Avoca... ● Sum of Bana... ● Sum of Ora...</p><table><thead><tr><th>Entity</th><th>Sum of Apples Production (bn)</th><th>Sum of Avocados Production (bn)</th><th>Sum of Bananas Production (bn)</th><th>Sum of Oranges Production (bn)</th></tr></thead><tbody><tr><td>Armenia</td><td>1.0</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>Central Asia ...</td><td>0.5</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>Czechia</td><td>0.2</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>India</td><td>0.0</td><td>0.0</td><td>0.2</td><td>0.0</td></tr><tr><td>Czechoslova...</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>Belgium-Lux...</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.5</td></tr><tr><td>Belgium</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>Afghanistan</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>Europe</td><td>0.0</td><td>0.0</td><td>0.5</td><td>0.0</td></tr><tr><td>Croatia</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></tr></tbody></table></div>	Entity	Sum of Apples Production (bn)	Sum of Avocados Production (bn)	Sum of Bananas Production (bn)	Sum of Oranges Production (bn)	Armenia	1.0	0.0	0.0	0.0	Central Asia ...	0.5	0.0	0.0	0.0	Czechia	0.2	0.0	0.0	0.0	India	0.0	0.0	0.2	0.0	Czechoslova...	0.0	0.0	0.0	0.0	Belgium-Lux...	0.0	0.0	0.0	0.5	Belgium	0.0	0.0	0.0	0.0	Afghanistan	0.0	0.0	0.0	0.0	Europe	0.0	0.0	0.5	0.0	Croatia	0.0	0.0	0.0	0.0
Entity	Sum of Apples Production (bn)	Sum of Avocados Production (bn)	Sum of Bananas Production (bn)	Sum of Oranges Production (bn)																																																					
Armenia	1.0	0.0	0.0	0.0																																																					
Central Asia ...	0.5	0.0	0.0	0.0																																																					
Czechia	0.2	0.0	0.0	0.0																																																					
India	0.0	0.0	0.2	0.0																																																					
Czechoslova...	0.0	0.0	0.0	0.0																																																					
Belgium-Lux...	0.0	0.0	0.0	0.5																																																					
Belgium	0.0	0.0	0.0	0.0																																																					
Afghanistan	0.0	0.0	0.0	0.0																																																					
Europe	0.0	0.0	0.5	0.0																																																					
Croatia	0.0	0.0	0.0	0.0																																																					

Business Question	Power BI Visualisation Used	Screenshot
Summary insights & global patterns	Bullet point summary based on all charts	 <p>REPORT</p> <ul style="list-style-type: none"> . 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 tonnes. . 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 significant 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). and oranges (26 billion tonnes).