

**A
SYNOPSIS
ON**

**"GLOBAL FOOD PRODUCTION TRENDS
AND ANALYSIS A COMPREHENSIVE STUDY
FROM 1961 TO 2023 USING POWER BI"**

Submitted By

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Under the Guidance of

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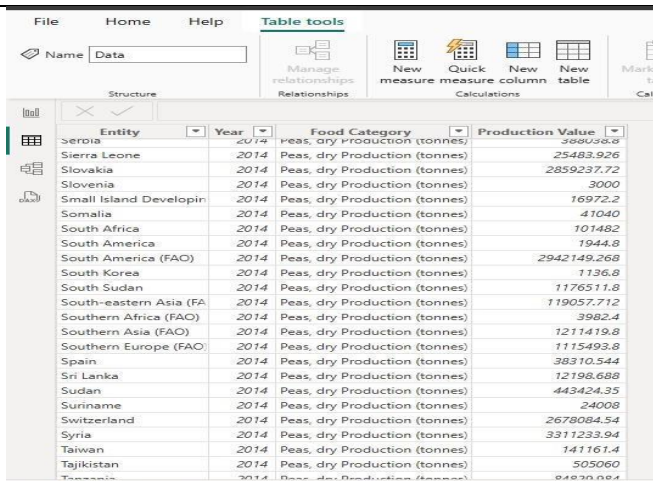
Academic Year

2024-25

Date	12 March 2025
Team ID	PNT2025TMID02840
Project Name	Global Food Production trends and Analysis:A Comprehensive Study from 1961 to 2023 Using Power BI
Maximum Marks	

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No	Parameter	Screenshot / Values																																																																																																				
1.	Data Rendered	<p>The dataset has 11,912 entries with 24 columns. Columns include:</p> <ul style="list-style-type: none">• Entity (Country or region)• Year (1961 to 2023)• Production quantities for various crops and food products, such as:<ul style="list-style-type: none">○ Maize, Rice, Wheat, Tomatoes, Tea, Sweet potatoes, Sunflower seeds○ Sugar cane, Soybeans, Rye, Potatoes, Oranges, Peas○ Palm oil, Grapes, Coffee, Cocoa beans, Chicken meat, Bananas, Avocados, Apples <p>After transforming data it only consists 4 columns.</p>																																																																																																				
2.	Data Preprocessing	 <p>The screenshot shows the Power BI Desktop interface. The 'Table tools' ribbon is active, displaying options for 'Manage relationships', 'New Quick measure', 'New Quick measure column', and 'New Quick table'. Below the ribbon, a data table is visible with the following columns: Entity, Year, Food Category, and Production Value. The table lists various countries and regions with their corresponding production values for 'Peas, dry Production (tonnes)' in 2014.</p> <table><tr><th>Entity</th><th>Year</th><th>Food Category</th><th>Production Value</th></tr><tr><td>Serbia</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>38836.8</td></tr><tr><td>Sierra Leone</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>25483.926</td></tr><tr><td>Slovakia</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>2859237.72</td></tr><tr><td>Slovenia</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>3000</td></tr><tr><td>Small Island Developin</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>16972.2</td></tr><tr><td>Somalia</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>41040</td></tr><tr><td>South Africa</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>101482</td></tr><tr><td>South America</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>1944.8</td></tr><tr><td>South America (FAO)</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>2942149.268</td></tr><tr><td>South Korea</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>1136.8</td></tr><tr><td>South Sudan</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>1176511.8</td></tr><tr><td>South-eastern Asia (FA</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>119057.712</td></tr><tr><td>Southern Africa (FAO)</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>3982.4</td></tr><tr><td>Southern Asia (FAO)</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>1211419.8</td></tr><tr><td>Southern Europe (FAO)</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>1115493.8</td></tr><tr><td>Spain</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>38310.544</td></tr><tr><td>Sri Lanka</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>12198.688</td></tr><tr><td>Sudan</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>443424.35</td></tr><tr><td>Suriname</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>24008</td></tr><tr><td>Switzerland</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>2678084.54</td></tr><tr><td>Syria</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>3311233.94</td></tr><tr><td>Taiwan</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>141161.4</td></tr><tr><td>Tajikistan</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>505060</td></tr><tr><td>Togo</td><td>2014</td><td>Peas, dry Production (tonnes)</td><td>84870.084</td></tr></table>	Entity	Year	Food Category	Production Value	Serbia	2014	Peas, dry Production (tonnes)	38836.8	Sierra Leone	2014	Peas, dry Production (tonnes)	25483.926	Slovakia	2014	Peas, dry Production (tonnes)	2859237.72	Slovenia	2014	Peas, dry Production (tonnes)	3000	Small Island Developin	2014	Peas, dry Production (tonnes)	16972.2	Somalia	2014	Peas, dry Production (tonnes)	41040	South Africa	2014	Peas, dry Production (tonnes)	101482	South America	2014	Peas, dry Production (tonnes)	1944.8	South America (FAO)	2014	Peas, dry Production (tonnes)	2942149.268	South Korea	2014	Peas, dry Production (tonnes)	1136.8	South Sudan	2014	Peas, dry Production (tonnes)	1176511.8	South-eastern Asia (FA	2014	Peas, dry Production (tonnes)	119057.712	Southern Africa (FAO)	2014	Peas, dry Production (tonnes)	3982.4	Southern Asia (FAO)	2014	Peas, dry Production (tonnes)	1211419.8	Southern Europe (FAO)	2014	Peas, dry Production (tonnes)	1115493.8	Spain	2014	Peas, dry Production (tonnes)	38310.544	Sri Lanka	2014	Peas, dry Production (tonnes)	12198.688	Sudan	2014	Peas, dry Production (tonnes)	443424.35	Suriname	2014	Peas, dry Production (tonnes)	24008	Switzerland	2014	Peas, dry Production (tonnes)	2678084.54	Syria	2014	Peas, dry Production (tonnes)	3311233.94	Taiwan	2014	Peas, dry Production (tonnes)	141161.4	Tajikistan	2014	Peas, dry Production (tonnes)	505060	Togo	2014	Peas, dry Production (tonnes)	84870.084
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3.	Utilization of Data Filters	<p>Top 7 Production Values Bottom 7 Production Vlaues</p>																																																																																																				

		Top 10 Production value by year
4.	DAX Queries Used	<p>1.Top producing Country = VAR TopCountry =TOPN(1, SUMMARIZE(Data, Data[Entity], "TotalProduction", SUM(Data[Production Value])), [TotalProduction], DESC) RETURN CONCATENATEX(TopCountry, Data[Entity], ", ")</p> <p>2. TOP 5 countries = VAR Topcountries= TOPN(5, SUMMARIZE(Data, Data[Entity], "TotalProduction", SUM(Data[Production Value])), [TotalProduction], DESC) RETURN CONCATENATEX(ADDCOLUMNS(TopCountries, "Rank", RANKX(TopCountries, [TotalProduction], , DESC)), [Rank] & " : " & [Entity], " ")</p> <p>3. Target = SUM(Data[Production Value])*0.2</p>
5.	Dashboard design	

6	Report Design	<div><div><div><div><div>Harvest Trends: Understanding Global Food Production</div><div><div>22</div><div>Count of Food Category</div></div><div><div>61</div><div>Count of Year</div></div><div><div>2.00T</div><div>Sum of Production</div></div></div><div><div><div>Top 7 Production Value by Country</div></div><div><div>Bottom 7 Production Value by Country</div></div></div><div><div><div>Countries</div><div>Food Category</div></div><div><div>Top 5 Production Value by Food Category</div></div><div><div>Bottom 7 Production Value by Year</div></div><div><div>Top 10 Production Value by Year</div></div></div></div><div><div><div>Sum of Production Value and Target</div></div><div><div>Sum of Production Value by Year</div></div><div><div>Sum of Production Value by Year</div></div></div><div><div><div>Food Category</div><div>Year</div></div><div><div>Bottom 5 Production Value by Country</div></div><div><div>Bottom 5 Production Value by Food Category</div></div></div><div><div><div>Bottom 5 Production Value by Country</div></div><div><div>Bottom 5 Production Value by Year</div></div></div></div></div>
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