

Project Development Phase
Model Performance Test

Date	10 February 2025
Team ID	PNT2025TMID02533
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	<div><div>Food_project</div><div><div>HomeTransformAdd ColumnViewToolsHelp</div><div><div>Table.RenameColumns(*Unpivoted Columns*,([{"Attribute", "Food Type"}, {"Value", "Production Value"}])</div><div><div>Country</div><div>Year</div><div>Food Type</div><div>Production Value</div></div></div></div><table><tr><td>1</td><td>Afghanistan</td><td>1961</td><td>Maize Production (tonnes)</td><td>700000</td></tr><tr><td>2</td><td>Afghanistan</td><td>1961</td><td>Rice Production (tonnes)</td><td>319000</td></tr><tr><td>3</td><td>Afghanistan</td><td>1961</td><td>Yams Production (tonnes)</td><td>7467702</td></tr><tr><td>4</td><td>Afghanistan</td><td>1961</td><td>Wheat Production (tonnes)</td><td>2279000</td></tr><tr><td>5</td><td>Afghanistan</td><td>1961</td><td>Tomatoes Production (tonnes)</td><td>1873812</td></tr><tr><td>6</td><td>Afghanistan</td><td>1961</td><td>Tea Production (tonnes)</td><td>56315</td></tr><tr><td>7</td><td>Afghanistan</td><td>1961</td><td>Sweet potatoes Production (tonnes)</td><td>3270871</td></tr><tr><td>8</td><td>Afghanistan</td><td>1961</td><td>Sunflower seed Production (tonnes)</td><td>12000</td></tr><tr><td>9</td><td>Afghanistan</td><td>1961</td><td>Sugar cane Production (tonnes)</td><td>45000</td></tr><tr><td>10</td><td>Afghanistan</td><td>1961</td><td>Soybeans Production (tonnes)</td><td>71813</td></tr><tr><td>11</td><td>Afghanistan</td><td>1961</td><td>Rye Production (tonnes)</td><td>10290</td></tr><tr><td>12</td><td>Afghanistan</td><td>1961</td><td>Potatoes Production (tonnes)</td><td>130000</td></tr><tr><td>13</td><td>Afghanistan</td><td>1961</td><td>Oranges Production (tonnes)</td><td>10100</td></tr><tr><td>14</td><td>Afghanistan</td><td>1961</td><td>Peas, dry Production (tonnes)</td><td>232910</td></tr><tr><td>15</td><td>Afghanistan</td><td>1961</td><td>Palm oil Production (tonnes)</td><td>1131882</td></tr><tr><td>16</td><td>Afghanistan</td><td>1961</td><td>Grapes Production 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3.	Utilization of Data Filters	Top 7 Production Values Bottom 7 Production Vlaues																																																																																																																																																																
		Top 10 Production value by year																																																																																																																																																																
4.	DAX Queries Used	<div>1.Top producing Country = VAR TopCountry =TOPN(1, SUMMARIZE(Data, Data[Entity], "TotalProduction", SUM(Data[Production Value])), [TotalProduction], DESC) RETURN CONCATENATEX(TopCountry, Data[Entity], ", ")</div> <div>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], " ")</div> <div>3. Target = SUM(Data[Production Value])*0.2</div>																																																																																																																																																																

5. Dashboard design



