

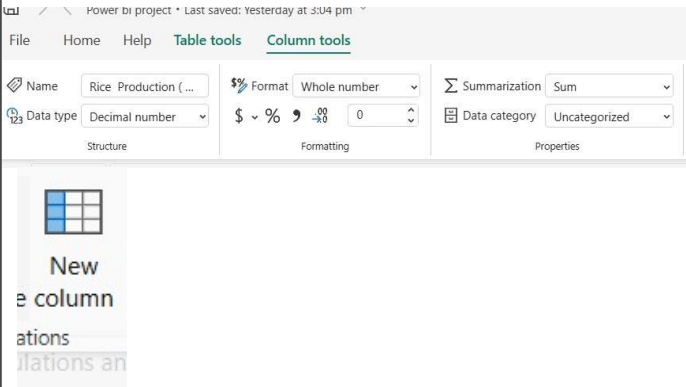
Project Development Phase

Model Performance Test

Date	25 March 2025
Team ID	PNT2025TMID06686
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	24 column and 11912 Rows.
2.	Data Preprocessing	 <p>The screenshot shows the Power BI interface with the 'Column tools' ribbon active. The 'Name' field is 'Rice Production (...)', 'Format' is 'Whole number', 'Summarization' is 'Sum', 'Data type' is 'Decimal number', and 'Data category' is 'Uncategorized'. Below the ribbon, a 'New column' button is visible.</p>
3.	Utilization of Data Filters	We had shorted the data by giving the data type text, whole no. and the decimal no.

4.	DAX Queries Used	-- Categorizing Regional Production Contribution Regional_Production_Categor y = SWITCH(TRUE(), [Region] IN {"Europe", "Asia"}, "High Contribution", [Region] IN {"North America", "South America"}, "Moderate Contribution", [Region] IN {"Africa", "Oceania"}, "Low Contribution", "Unknown")
----	------------------	---

		<pre> -- Identifying High-Production Fruits Top_Fruit_Production = SWITCH(TRUE(), [Fruit] = "Grapes", "Highest Production - 43 Billion Tonnes", [Fruit] = "Apples", "High Production", [Fruit] = "Bananas", "Moderate Production", [Fruit] = "Oranges", "Significant Production", "Other Fruits") -- Maize Production Growth Trend (Post-1980s) Maize_Growth_Trend = SWITCH(TRUE(), [Year] < 1980, "Stable/Low Growth", [Year] >= 1980 && [Year] < 2000, "Moderate Growth", [Year] >= 2000, "Consistent High Growth") -- Total Food Production Category Based on Volume Food_Production_Volume = SWITCH(TRUE(), [Production_Tonnes] > 40, "Very High Production", [Production_Tonnes] > 20, "High Production", [Production_Tonnes] > 10, "Moderate Production", "Low Production") -- Market Impact Based on High-Yield Fruits Market_Impact = SWITCH(TRUE(), [Fruit] = "Grapes", "Abundant Supply - Potential Price Drop", </pre>
--	--	--

		<p>[Fruit] IN {"Apples", "Bananas", "Oranges"}, "Stable Market - Consistent Demand", "Other Fruits", "Varied Impact"</p> <p>)</p> <p>-- Strategic Decision-Making Category for ABC Company</p> <p>Strategic_Insights = SWITCH(TRUE(),</p> <p>[Region] IN {"Europe", "Asia"} &&</p> <p>[Production_Tonnes] > 20, "Key Market for Expansion",</p> <p>[Region] IN {"North America", "South America"} && [Production_Tonnes] > 10, "Emerging Market - Growth Potential",</p> <p>[Region] IN {"Africa", "Oceania"} &&</p> <p>[Production_Tonnes] < 10, "Developing Market - Limited Influence",</p> <p>"Unknown Strategy"</p> <p>)</p>
5.	Dashboard design	

6	Report Design	<div data-bbox="703 226 1281 581"><div data-bbox="703 226 987 581"></div><div data-bbox="987 226 1281 581"><h3 data-bbox="1096 226 1144 252">Report</h3><ul data-bbox="998 256 1258 577" 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 (28 billion tonnes).</div></div>
---	---------------	---