Project Development Phase
Model Performance Test

Date	09 March 2025
Team ID	PNT2025TMID01141
Project Name	Global Malnutrition Trends: A Power BI Analysis (1983-2019)
Maximum Marks	

Model Performance Testing:

S.No.	Parameter	Screenshot / Values
1.	Data Rendered	**2 Tables Taken**: • **Country-wise-average Table**: Columns – 11 Rows – 140 • **malnutrition-estimates Table**: Columns – 20 Rows – 923
2.	Data Preprocessing	• Replaced Error from Survey Sample Column from malnutrition-estimates table to 0 • Changed data types of Columns Severe Wasting, Underweight, Overweight, Wasting, Stunting, U5 Population in malnutrition-estimates table. • Changed data types of Columns Severe Wasting, Underweight, Overweight, Wasting, Stunting, U5 Population in Country-wise-average table. • Removed null values
3.	Utilization of Data Filters	2 Filters used • Top N – Top 10 filter in Line Chart • Top N – Top 5 filter in Clustered bar Chart
4.	DAX Queries Used	• **Avg_Stunting** = AVERAGE('malnutrition-estimates'[Stunting]) • **Avg_Underweight** = AVERAGE('malnutrition-estimates'[Underweight]) • **Avg_Wasting** = AVERAGE('malnutrition-estimates'[Wasting]) • **Total_U5_Population** = SUM('malnutrition-estimates'[U5 Population ('000s)]) • **YoY_Stunting_Change** = VAR PrevYear = CALCULATE(AVERAGE('malnutrition-estimates'[Stunting]), PREVIOUSYEAR('malnutrition-estimates'[Year])) RETURN AVERAGE('malnutrition-estimates'[Stunting]) – PrevYear • **YoY_Wasting_Change** = VAR PrevYear = CALCULATE(AVERAGE('malnutrition-estimates'[Wasting]), PREVIOUSYEAR('malnutrition-estimates'[Year])) RETURN AVERAGE('malnutrition-estimates'[Wasting]) – PrevYear

		• **YoY_Underweight_Change** = VAR PrevYear = CALCULATE(AVERAGE ('malnutrition-estimates'[Underweight]), PREVIOUSYEAR('malnutrition-estimates'[Year])) RETURN AVERAGE('malnutrition-estimates'[Underweight]) – PrevYear • **Stunting_Per_1000** = ([Stunting] / 100) * [U5 Population ('000s)] * 1000 • **Underweight_Per_1000** = ([Underweight] / 100) * [U5 Population ('000s)] * 1000 • **Malnutrition_Severity** = IF([Stunting] >= 40, "High", IF([Stunting] >= 20, "Medium", "Low")) • **Income_Group =** SWITCH([Income Classification], 0, "Low Income", 1, "Lower-Middle Income", 2, "Upper-Middle Income", 3, "High Income")
5.	Dashboard design	No of Visualizations / Graphs – • Card – Sum of Overweight • Card – Sum of Stunting • Card – Sum of Underweight • Card – Total_U5_Population • Clustered Bar Chart – Year-wise Stunting Change • Slicer – Year • Slicer – Country • Line Chart – Top 10 Countries by Average Stunting • Clustered Bar Chart – Stunting, Underweight and Wasting by Income Classification • Map – World Rate For Malnutrition
6	Report Design	No of Visualizations / Graphs - • Card – Sum of Overweight • Card – Sum of Stunting • Card – Sum of Underweight • Card – Total_U5_Population • Clustered Bar Chart – Year-wise Stunting Change • Slicer – Year • Slicer – Country • Line Chart – Top 10 Countries by Average Stunting • Clustered Bar Chart – Stunting, Underweight and Wasting by Income Classification • Map – World Rate For Malnutrition