Project Design Phase Proposed Solution Template

Date	12 March 2025
Team ID	PNT2025TMID02626
Project Name	Global Food Production Trend and Analysis A Coprehensive Study from 1961 to 2023 Using Power BI
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The world needs to produce enough food for a growing population while protecting the environment and ensuring fair access. Challenges like climate change, water shortages, food waste, and inefficient farming make this difficult. We must find better ways to grow, distribute, and consume food sustainably for a healthier future
2.	Idea / Solution description	Using Power BI, food production data from 1961 to 2023 was analysed, focusing on key commodities such as rice, wheat, maize, coffee, tea, and various fruits like apples, bananas, and grapes. The study provides interactive visualizations to track trends and regional contributions.
3.	Novelty / Uniqueness	In Power BI, the uniqueness of improving global food production lies in using real-time data, AI-driven insights, and predictive analytics to optimize farming, reduce waste, and improve supply chains. By integrating satellite data, IoT sensors, and market trends, Power BI can help farmers and policymakers make smart, data-driven decisions for sustainable food production. This approach enhances efficiency, reduces environmental impact, and ensures better food distribution worldwide

4.	Social Impact / Customer Satisfaction	The analysis benefits agricultural decision-makers, policymakers, and farmers by providing data-driven insights that can help improve food security and promote sustainable production practices.
5.	Business Model (Revenue Model)	The business model for global food production generates revenue through smart farming technology, sustainable agriculture products, supply chain services, data-driven insights, and waste management solutions.
6.	Scalability of the Solution	The solution can be scaled by integrating more agricultural commodities, real-time data updates.