Project Design Phase
Proposed Solution Template

Date	25 MARCH 2025
Team ID	PNT2025TMID06994
Project Name	Global Food Production Trends and Analysis: A Comprehensive 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)	Global food production has seen significant growth, yet challenges remain in distribution, sustainability, and accessibility. While total production of staple crops like wheat (282 billion tonnes) and rice (269 billion tonnes) has increased, food insecurity persists. Additionally, climate change and regional disparities in production affect food availability and affordability
2.	Idea / Solution description	Leveraging historical data from 1961 to 2023, this project aims to develop data-driven insights for optimizing food production, reducing waste, and improving distribution channels. Using Power BI visualizations, the solution will identify key production trends, predict future demands, and propose policies for sustainable agriculture.
3.	Novelty / Uniqueness	• Utilization of over 60 years of historical data to create predictive analytics for future food production. • Regional insights into key contributors like Africa (green coffee leader) and Asia/Europe (fruit production hubs).
4.	Social Impact / Customer Satisfaction	• Enhanced food security by identifying gaps in production and distribution. • Support for farmers and policymakers in making informed decisions. • Contribution to reducing food waste and promoting efficient resource utilization.
5.	Business Model (Revenue Model)	• **Subscription-based data analytics platform:** Farmers, governments, and businesses subscribe to access detailed insights. • **Consulting services:** Providing insights to policymakers and organizations for agricultural strategy development.

		• **Collaboration with Agri-tech firms:** Selling data-driven solutions to optimize agricultural supply chains.
6.	Scalability of the Solution	• **Regional Adaptability:** The model can be tailored for specific countries based on their agricultural production trends • **Expansion to other commodities:** Beyond staple crops, this approach can be applied to livestock and fisheries.