Project Initialization and Planning Phase

Date	25-12-2025
Team ID	
Project Title	Global Food Production Analysis (1961–2023)
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project proposal outlines a data-driven solution to analyze long-term global food production trends. The solution uses data visualization and analytics to help stakeholders understand crop production patterns, regional contributions, and growth trends over time.

Project Overview	
Objective	The primary objective of this project is to analyze global food production data from 1961 to 2023 and present meaningful insights using interactive visual dashboards to support data-driven decision-making in the agricultural sector.
Scope	The scope of this project includes collecting, cleaning, analyzing, and visualizing global food production data for major crops such as rice, wheat, maize, fruits, tea, and coffee across different regions and years using Power BI.
Problem Statement	
Description	Global food production data is vast and complex, making it difficult for analysts and decision-makers to identify trends, compare crops, and understand regional production patterns using traditional reports and spreadsheets.
Impact	Solving this problem enables better understanding of agricultural trends, supports strategic planning, improves food security analysis, and helps organizations make informed decisions based on reliable insights.
Proposed Solution	
Approach	The project adopts a data analytics approach using Power BI. The

	dataset is cleaned and transformed, followed by the creation of calculated fields and interactive visualizations such as charts, graphs, and dashboards to analyze trends and patterns effectively.
Key Features	Interactive dashboards with filters for crops, regions, and years Trend analysis of major food crops over time Comparative analysis of regional production User-friendly visual representations for quick insights

Resource Requirements

Resource Type	**Description**	**Specification/Allocation**
Hardware		
Computing Resources	Laptop / Desktop System	Intel i5 or higher
Memory	RAM	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
Software		
Frameworks	Business Intelligence Tool	Power BI Desktop
Libraries	Data processing support	Power Query, DAX
Development Environment	Analysis & Visualization	Power BI Desktop
Data		
Data	Global food production dataset	CSV format, 1961–2023