Data Collection Plan & Raw Data Sources

Date	28-07-2025
Team ID	HK
Project Title	Predicting Plant Growth Stages with Environmental and Management Data Using Power BI
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification

Elevate your data strategy with the Data Collection plan and the Raw Data Sources report, ensuring meticulous data curation and integrity for informed decision-making in every analysis and decision-making endeavour.

Data Collection Plan

Section	Description
Project Overview	This project aims to analyse the relationship between soil type, irrigation frequency, environmental conditions (humidity, temperature, sunlight), and plant growth performance. The objective is to create a Power BI dashboard that supports data-driven decisions in smart farming.
Data Collection Plan	The data was collected from multiple sources, including agricultural research datasets, public environmental data APIs, and manually recorded experimental data from controlled farming environments.
Raw Data Sources Identified	Data includes environmental metrics, soil types, fertilizer types, and plant growth outcomes. Sources are in CSV and Excel formats.

Raw Data Sources

Source Name	Description	Location/URL	Format	Size	Access Permissions
Smart Farming Data	Contains information on soil type, water frequency, humidity, temperature, and growth outcome. Used for visualizing	[Custom/Offline Data]	CSV	~1 MB	Private (Created for project)
	environmental impact.				
Fertilizer Usage & Growth	Contains types of fertilizers used (organic, chemical, none) and associated plant growth milestones.	[Custom/Offline Data]	Excel	~500 KB	Private
Dataset 3: Temperature & Humidity Records	Environmental dataset showing average temperature and humidity across farming zones.	https://data.gov.in	CSV	~5 MB	Public

Dataset 4: Soil Performance Data	Benchmark soil growth performance under different irrigation strategies from agriculture research articles.	https://www.kaggle.com/agriculture-dataset	Excel	~2 MB	Public