# **Data Collection Plan & Raw Data Sources**

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| Date | 28-07-2025 |
| Team ID | SIMRAN GUPTA |
| 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

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| **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. |

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# Raw Data Sources

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| --- | --- | --- | --- | --- | --- |
| **Source**  **Name** | **Description** | **Location/URL** | **Forma**  **t** | **Size** | **Access Permission**  **s** |
| **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) |
|  | environmenta l impact. |  |  |  |  |
| **Fertilizer**  **Usage &**  **Growth** | Contains types of fertilizers used (organic, chemical, none) and associated plant growth milestones. | [Custom/Offline Data] | Excel | ~50  0 KB | Private |
| **Dataset 3: Temperatur e & Humidity**  **Records** | Environmenta  l dataset showing average temperature and humidity across farming zones. | [https://data.gov.in](https://data.gov.in/) | CSV | ~5  MB | Public |
| **Dataset 4:**  **Soil**  **Performanc e Data** | Benchmark soil growth performance under different irrigation strategies from agriculture research articles. | [https://www.kaggle.com/agriculture](https://www.kaggle.com/agriculture-dataset)  [-dataset](https://www.kaggle.com/agriculture-dataset) | Excel | ~2  MB | Public |