Project Design Phase-II

Data Flow Diagram & User Stories

Date	10 March 2025
Team ID	PNT2025TMID02626
Project Name	Global Food Production and Trend Analysis A Comprehensive Study from 1961 to 2023 using power BI
Maximum Marks	4

Data Flow Diagrams:

A **Data Flow Diagram (DFD)** is a graphical representation of how data moves through a system. It illustrates how data is processed, stored, and transferred between different components of a system. DFDs are widely used in system analysis and design to visualize the flow of information.

Data Flow Diagram

Agricultural Research Scientist	→	Data Collection and Analysis	—	Community Egagement and Advocacy	—	Implementation of Agricultural Practices

Policy Maker	→	Policy Development	—	Agricultural Poducer	—	Agricultural Practices Repository
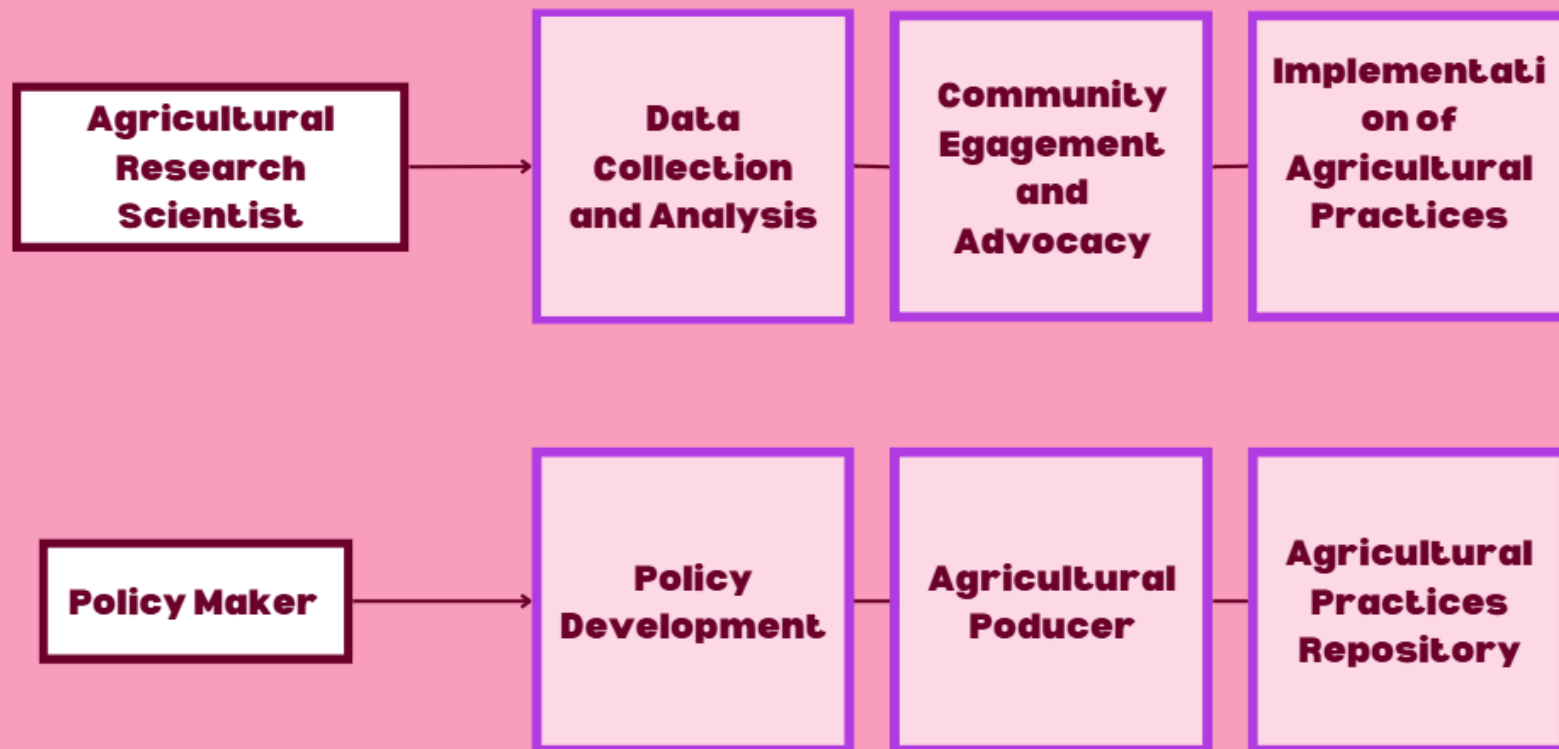
User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Agricultural Research Scientist	Access to Research Data	USN-1	As an **Agricultural Research Scientist**, I want to develop and test innovative crop breeding techniques and sustainable farming practices so that I can enhance global food production while ensuring environmental sustainability and resilience to climate change.	• The data repository is accessible to authorized users. • Data is organized and searchable. • Users can download datasets.	High	Sprint-1
	Collaboration with Stakeholders	USN-2	As an Agricultural Research Scientist, I want to collaborate with policymakers and NGOs so that I can ensure my research findings are translated into actionable policies and community programs.	• Collaboration tools are available (e.g., shared documents, communication channels). • Feedback from stakeholders is documented.	Medium	Sprint-2
Policy Maker	Evidence-Based Policy Development	USN-3	As a Policy Maker, I want to receive evidence-based insights from research data so that I can develop effective policies that address food security and sustainability.	• Research data is presented in a clear and actionable format. • Policy drafts are informed by research findings.	High	Sprint-1
	Stakeholder Engagement	USN-4	As a Policy Maker, I want to engage with stakeholders, including farmers and NGOs, so that I can gather diverse perspectives and create inclusive policies.	• Stakeholder meetings are scheduled and documented. • Feedback from stakeholders is incorporated into policy drafts.	High	Sprint-2

NGO Representative	Community Needs Assessment	USN-5	As an NGO Representative, I want to conduct community needs assessments so that I can advocate for policies that truly reflect the needs of marginalized communities.	• Assessment tools (surveys, interviews) are developed. • Results are compiled and shared with policymakers.	High	Sprint-2
	Access to Data on Food Security Issues	USN-6	As an NGO Representative, I want to access data on food security issues so that I can effectively communicate the challenges faced by communities to policymakers.	• Data on food security is available and up-to-date • Reports can be generated for advocacy purposes.	Medium	Sprint-2
Agricultural Producer	Practical Recommendations	USN-7	As an Agricultural Producer, I want to receive practical recommendations based on research findings so that I can implement sustainable practices that improve my crop yields.	• Recommendations are tailored to specific crops and regions. • Producers can provide feedback on the recommendations.	High	Sprint-3
	Workshops and Training Sessions	USN-8	As an Agricultural Producer, I want to participate in workshops and training sessions so that I can learn about new technologies and practices that can enhance my farming operations.	• Workshops are scheduled and advertised. • Attendance and feedback are collected after each session.	Medium	Sprint-3