**Overall Project Timeline**

**Project Name:** Understanding Rice Cultivation Practices and Yield Patterns among Smallholder Farmers in India  
**Team Members:** Delphine Isumbabyose, Ashura Ishimwe, Claudine Uwase, Jedid Jah Uwiwe  
**Start Date:** 08 July 2025  
**Expected End Date:** 30 July 2025  
**Reporting Date:** 15 July 2025

### **Project Timeline Overview**

| Phase/Task | Description | Start Date | End Date | Team Lead | Status |
| --- | --- | --- | --- | --- | --- |
| **Phase 1: Data Acquisition & Cleaning** | Collected paddy cultivation data from FAIR Forward/JEEViKA. Cleaned 270+ columns: dropped unused variables, handled missing values, standardized units and text fields. | 08/07/2025 | 12/07/2025 | Ashura | Completed |
| **Phase 2: Exploratory Data Analysis** | Analyzed distribution of key variables (yield, fertilizer use, irrigation frequency). Visualized regional patterns and grouped practices. | 13/07/2025 | 15/07/2025 | Claudine | In progress |
| **Phase 3: Statistical Analysis** | Ran correlation and regression between yield and practices. Performed t-tests, ANOVA, and chi-square to compare groups. | 15/07/2025 | 18/07/2025 | Delphine | In Progress |
| **Phase 4: Insight Generation & Reporting** | Interpreted statistical results to identify yield drivers. Summarized practices of high-yield vs low-yield groups. Drafted initial recommendations. | 19/07/2025 | 22/07/2025 | Jedid | Not Started |
| **Phase 5: Final Report & Dashboard** | Compiled results into PowerPoint and dashboard. Final report includes key visualizations and district-level summaries. | 23/07/2025 | 27/07/2025 | Team (Joint) | Not Started |

### **Gantt-Style Timeline**

| Week / Month | Phase/Task | Member(s) | Progress (%) | Notes |
| --- | --- | --- | --- | --- |
| Week 1 | Data Acquisition & Cleaning | Delphine | 100% | Dataset prepared and cleaned |
| Week 2 | EDA ,Statistical Analysis &  Insight Reporting | Ashura | 50% | EDA complete, statistical analysis ongoing |
| Week 3 | Final Report & Dashboard | Jedid, All | 0% | Scheduled to begin 19 July |
| Week 4 | Review/ updating and preparation of last demo. | Claudine, All | 0% | From 28 to 1 August/2025 |

### **Key Risks & Dependencies**

| Risk/Dependency | Impact Level | Mitigation Plan |
| --- | --- | --- |
| Wide-format dataset with high column count | High | Created filtered subset with only relevant columns |
| Missing yield or fertilizer quantity values and others | Medium | Imputed or excluded based on completeness logic |
| Time constraints across phases | Medium | Prioritized task-based distribution and set team leads per phase |