**Table 1.1 Farmer Agenda Functionality**

| **Functionality** | **Unit/Unitary** | **Performance** | **Volume** | **Regression** | **User Acceptance** |
| --- | --- | --- | --- | --- | --- |
| **Test type requirement** | Required | Optional and recommended | Optional but not recommended | Required | Required |
| **System environment** | Development | Quality | Sandbox | Quality | Production |
| **Team** | Project team | Both | N/A | Both | Customer team |
| **Rationale** | The Farmer Agenda requires unit testing for basic functionality, regression testing to ensure compatibility with other modules, and user acceptance testing to validate usability. Performance and volume testing are less critical but can be recommended for enhanced optimization. |  |  |  |  |

**Table 1.2 Farmer Bookkeeper Functionality**

| **Functionality** | **Unit/Unitary** | **Performance** | **Volume** | **Regression** | **User Acceptance** |
| --- | --- | --- | --- | --- | --- |
| **Test type requirement** | Required | Required | Required | Required | Required |
| **System environment** | Development | Evaluation | Quality | Quality | Production |
| **Team** | Project team | Both | Project team | Both | Customer team |
| **Rationale** | As this functionality involves financial data, all test types are critical. Performance and volume tests ensure the system handles large datasets. Regression and user acceptance are crucial to ensure reliability and user satisfaction. |  |  |  |  |

**Table 1.3 Crop Planner Functionality**

| **Functionality** | **Unit/Unitary** | **Performance** | **Volume** | **Regression** | **User Acceptance** |
| --- | --- | --- | --- | --- | --- |
| **Test type requirement** | Required | Required | Optional and recommended | Required | Required |
| **System environment** | Development | Quality | Sandbox | Quality | Production |
| **Team** | Project team | Both | Project team | Both | Customer team |
| **Rationale** | Testing focuses on performance for large-scale data modeling and regression for stability. Volume testing is optional, while user acceptance ensures alignment with customer expectations. |  |  |  |  |

**Table 1.4 Fleet Planner Functionality**

| **Functionality** | **Unit/Unitary** | **Performance** | **Volume** | **Regression** | **User Acceptance** |
| --- | --- | --- | --- | --- | --- |
| **Test type requirement** | Required | Optional and recommended | Optional but not recommended | Required | Required |
| **System environment** | Development | Evaluation | N/A | Quality | Production |
| **Team** | Project team | Both | N/A | Both | Customer team |
| **Rationale** | Core functionality requires unit, regression, and user acceptance tests. Performance testing is optional but could improve operational efficiency. |  |  |  |  |

**Table 1.5 Shipments Planner Functionality**

| **Functionality** | **Unit/Unitary** | **Performance** | **Volume** | **Regression** | **User Acceptance** |
| --- | --- | --- | --- | --- | --- |
| **Test type requirement** | Required | Required | Required | Required | Required |
| **System environment** | Development | Quality | Quality | Quality | Production |
| **Team** | Project team | Both | Both | Both | Customer team |
| **Rationale** | Critical for logistical efficiency, all test types are necessary to ensure seamless integration and scalability under real-world conditions. |  |  |  |  |

**Table 1.6 Farming Planner Functionality**

| **Functionality** | **Unit/Unitary** | **Performance** | **Volume** | **Regression** | **User Acceptance** |
| --- | --- | --- | --- | --- | --- |
| **Test type requirement** | Required | Optional and recommended | Optional and recommended | Required | Required |
| **System environment** | Development | Quality | Sandbox | Quality | Production |
| **Team** | Project team | Both | Project team | Both | Customer team |
| **Rationale** | Farming functionality requires robust testing to ensure reliable operation. Regression and user acceptance are critical, while volume and performance testing are recommended but not mandatory. |  |  |  |  |