Phase 1 – Project Title

Tractor Booking and Management System

1. Problem Statement

The agricultural sector often faces challenges in resource allocation, especially during peak farming seasons. Farmers require tractors for ploughing, sowing, and harvesting, but manual processes for booking tractors lead to conflicts, double-bookings, and inefficiencies. Tractor owners, on the other hand, struggle to manage schedules, track earnings, and avoid misuse of their assets. To solve these challenges, a Tractor Booking and Management System built on Salesforce will ensure transparency, automation, and ease of use for both farmers and tractor owners.

2. Objectives

- Farmer Registration & Profile Management – Farmers can register, manage their details, and request tractors.
- Tractor & Owner Records – Maintain details of tractors, their availability, rates, and owner information.
- Booking Management – Farmers can create booking requests, and owners can approve/reject them.
- Conflict-Free Scheduling – Prevent overlapping bookings with Salesforce automation.
- Payment & Revenue Tracking – Track costs, completed bookings, and revenue earned by owners.
- Notifications & Approvals – Send automated SMS/email notifications for booking confirmations or approvals.
- Reports & Dashboards – Monitor tractor utilization, revenue trends, and farmer demand patterns.

3. Stakeholder Analysis

- Farmers: Need easy booking of tractors, transparent pricing, and timely notifications.
- Tractor Owners: Want efficient scheduling, revenue tracking, and approval control.
- Agents/Brokers: Help farmers who are less tech-savvy in creating bookings.
- System Administrator: Manages tractor records, users, and ensures system security.
- Government/Agri Officers: Can monitor usage, subsidies, and resource allocation.

4. Business Process Mapping

Current (Without Salesforce): - Farmers contact tractor owners directly, often through middlemen. Scheduling conflicts and double bookings occur frequently. - Payments are handled manually,

causing disputes and delays. Proposed (With Salesforce System): - Farmers log into the system and request tractors by date/time. - The system automatically checks tractor availability and prevents conflicts. - Owners receive notifications and approve/reject requests. - Payments and revenues are tracked digitally. - Reports & dashboards provide insights into tractor utilization and farmer demand.

5. Industry-Specific Use Case Analysis

Challenges: - High demand for tractors during peak seasons leads to conflicts and inefficiencies. Lack of visibility on tractor availability and pricing causes delays for farmers. - Manual payment processes reduce trust and transparency. How Salesforce Helps: - Provides CRM-like profiles for farmers, tractor owners, and agents. - Automation ensures conflict-free booking and instant notifications. - Dashboards show utilization, revenue trends, and demand forecasts. - Integration with payment gateways ensures secure and transparent transactions.

6. AppExchange Exploration

Relevant Salesforce AppExchange apps that can be explored include: - SMS/WhatsApp Notification Apps (e.g., Twilio, ValueText) → for updates in local languages. - Payment Gateway Integrations (e.g., Stripe, Razorpay) → for secure, direct payments. - Scheduling Apps → advanced booking and calendar management. - Survey & Feedback Apps → collect farmer satisfaction and booking feedback. Decision: While useful, most apps are general-purpose, so this project will focus on custom Salesforce objects and automation tailored to tractor booking workflows, with selective integrations from AppExchange where needed.

Conclusion

The Tractor Booking and Management System will provide farmers with easy and transparent access to tractors, reduce scheduling conflicts, and allow tractor owners to manage their assets and revenue effectively. By leveraging Salesforce automation, dashboards, and integrations, the system will modernize agricultural resource management, increase efficiency, and support digital farming initiatives.