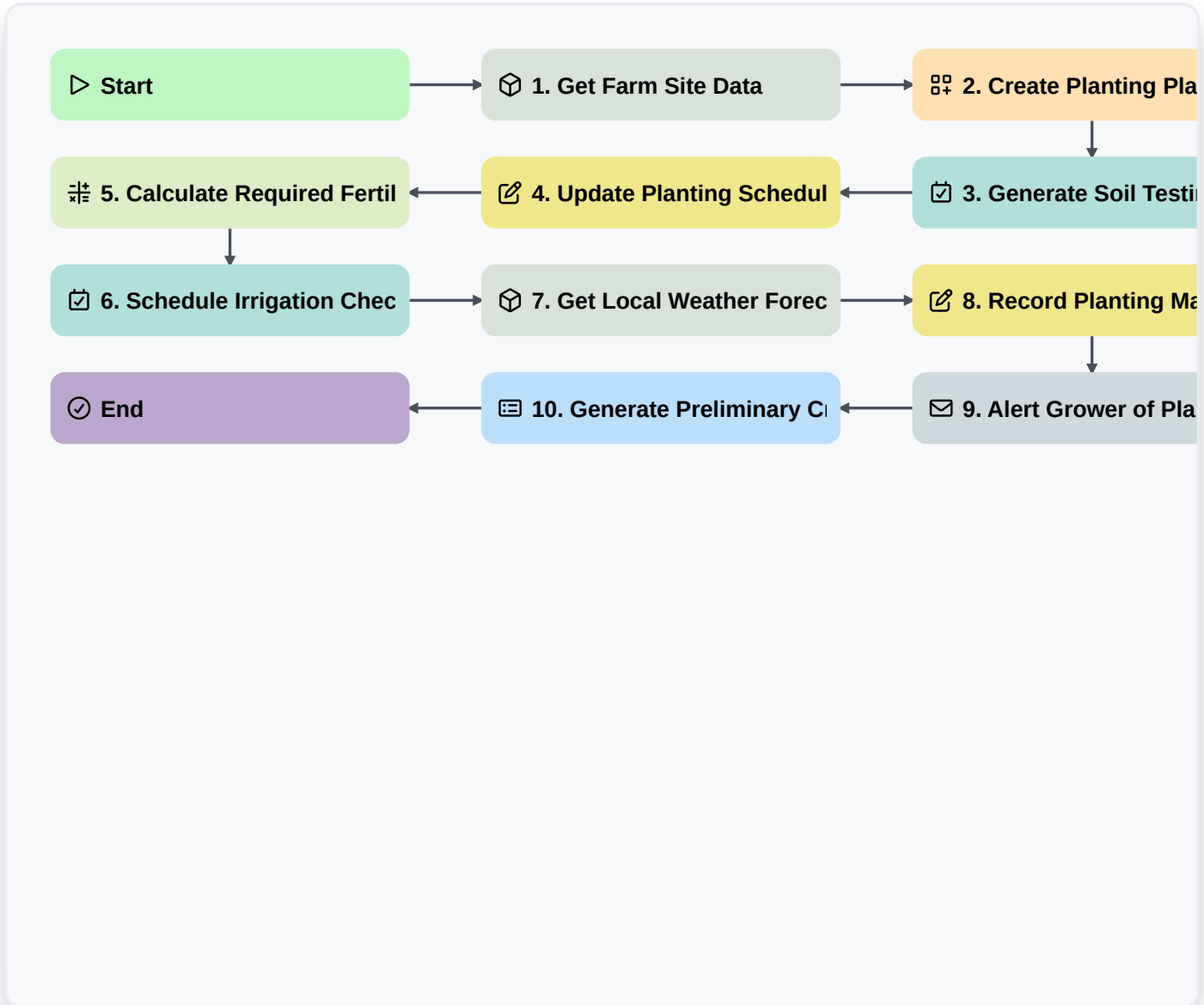


Sustainable Agriculture Planning Workflow: Resource Optimization For Modern Farming



▷ **Start**

Start of the Workflow/Process.

 **1. Get Farm Site Data**

Retrieves current soil composition, historical yield, and weather data for the specific farm site.

 **2. Create Planting Plan Entry**

Records the intended crop type, acreage, and planting date based on best practices.

 **3. Generate Soil Testing Task**

Creates a task for soil sample collection, assigning it to the technician and setting the due date.

 **4. Update Planting Schedule**

Allows updating the planting schedule with necessary adjustments based on initial soil analysis.

 **5. Calculate Required Fertilizer Dosage**

Calculates the optimal amount of NPK fertilizer needed based on soil test results and crop nutrient uptake needs.

📅 **6. Schedule Irrigation Check Task**

Creates recurring maintenance tasks for irrigation system checks.

📦 **7. Get Local Weather Forecast**

Retrieves real-time and forecasted weather data impacting crop growth.

✍️ **8. Record Planting Material Stock**

Updates the inventory levels of seeds and seedlings used in the current cycle.

✉️ **9. Alert Grower of Planting Status**

Sends an automated email notification to the farm manager regarding the completion or delay of critical tasks.

📄 **10. Generate Preliminary Crop Plan Report**

Creates a summary report detailing resource needs and recommended actions for the upcoming season.

🏁 **End**

Start of the Workflow/Process.