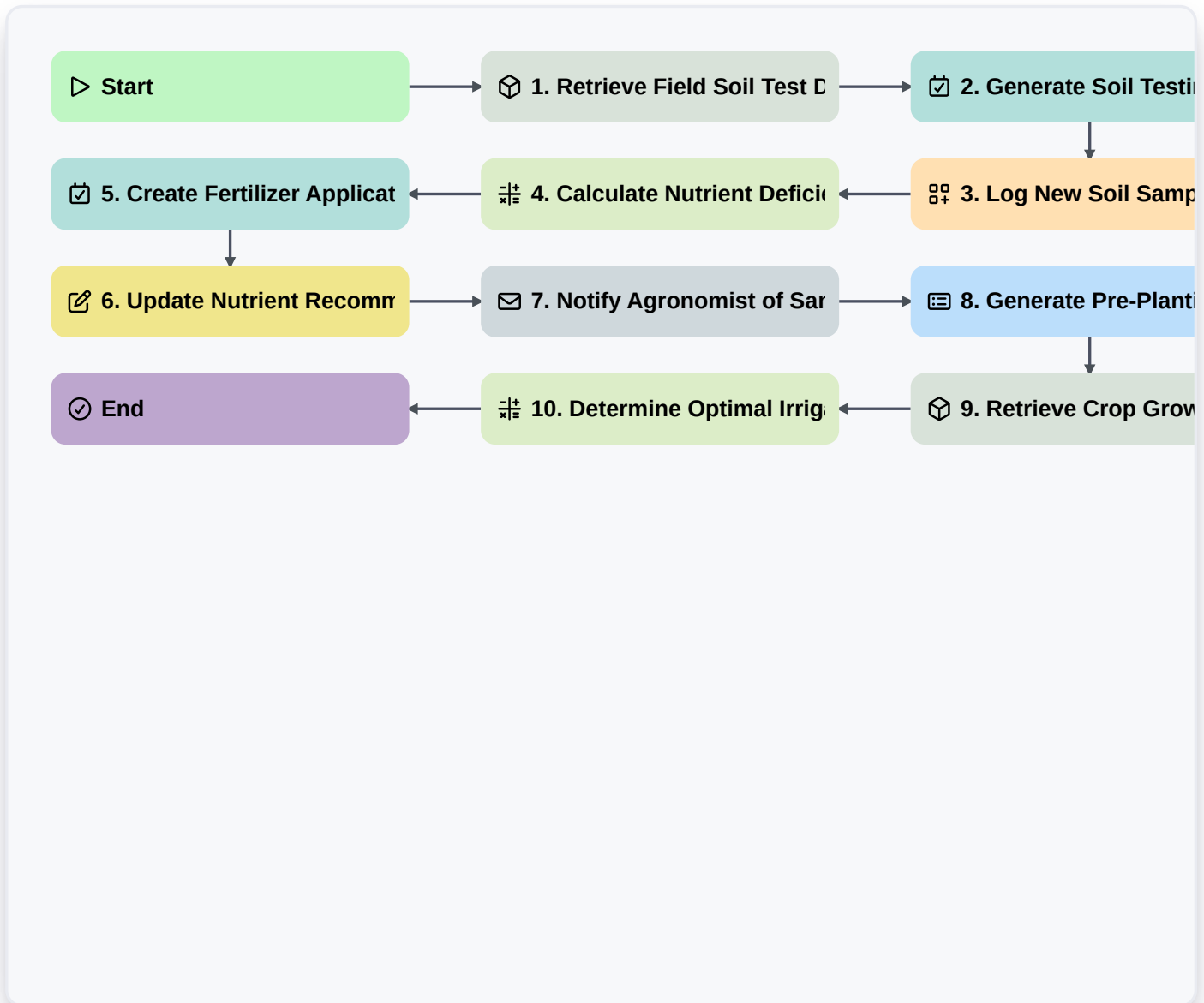


Farm Business Process Automation: Comprehensive Agriculture Workflow For Yield Optimization



▷ Start

Start of the Workflow/Process.

📦 1. Retrieve Field Soil Test Data

Fetch existing soil nutrient levels and analysis reports for the current field location.

📝 2. Generate Soil Testing Sampling Tasks

Automatically create actionable tasks for soil sampling based on historical data and zone requirements.

📄 3. Log New Soil Sample Result

Input and store the results from the physical soil testing process.

📊 4. Calculate Nutrient Deficiency Score

Calculate a composite score (e.g., N-P-K) to determine immediate nutrient needs.

✔ **5. Create Fertilizer Application Task**

Generate a specific work order for necessary fertilizer application based on the calculated score.

✍ **6. Update Nutrient Recommendation Records**

Update the farm's master record with the recommended fertilizer type, rate, and timing.

✉ **7. Notify Agronomist of Sampling Completion**

Send an email alert to the agronomist with the new soil test data attached for review.

📄 **8. Generate Pre-Planting Soil Analysis Report**

Compile all soil data, recommendations, and action items into a comprehensive report for the farm owner.

📦 **9. Retrieve Crop Growth Stage Data**

Get the current developmental stage of the specific crop (e.g., vegetative, flowering) to tailor recommendations.

⚙ **10. Determine Optimal Irrigation Needs**

Calculate required water volume based on crop growth stage, weather forecast, and soil type.

🏁 **End**

Start of the Workflow/Process.