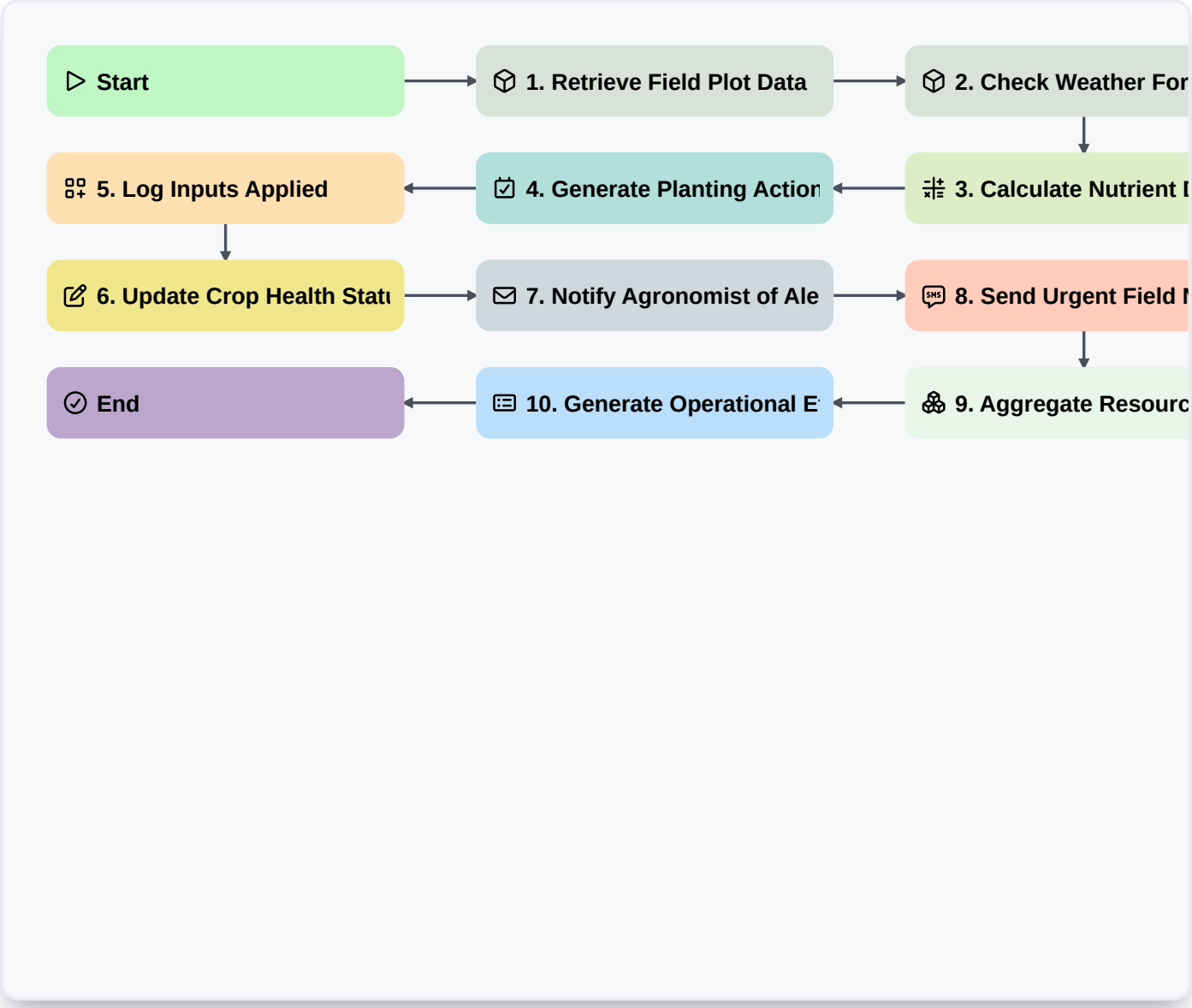
ChecklistGuro

Optimizing Farm Operations: End-To-End Agricultural Workflow Management



Start
Start of the Workflow/Process.

1. Retrieve Field Plot Data
Fetch current soil data, planting records, and historical yield data for the specified farm plot.

2. Check Weather Forecast
Get real-time and 7-day weather forecasts (rainfall, temperature) relevant to the farm location.

3. Calculate Nutrient Deficiency Score
Execute formula comparing soil nutrient levels against optimal thresholds to identify deficiencies.

4. Generate Planting Action Tasks
Create specific, assignable tasks for necessary inputs (e.g., 'Apply Nitrogen Fertilizer', 'Irrigate Sector B').

5. Log Inputs Applied
Create a record of all inputs used (fertilizer type, amount, pesticide details) after fieldwork.

6. Update Crop Health Status
Update the main crop data model with the current health assessment (e.g., scouting reports, disease incidence).

7. Notify Agronomist of Alerts
Send an email alert summarizing critical findings (e.g., high risk of blight) to the designated agronomist.

8. Send Urgent Field Notification
Send an SMS alert to field crew managers regarding immediate necessary actions (e.g., 'Pump failure in Sector 3').

9. Aggregate Resource Usage Summary
Calculate the total cumulative usage (water, labor hours) across all current operational entries for budgeting.

10. Generate Operational Efficiency Report
Compile a summary report detailing resource utilization vs. expected output for the reporting period.

End
Start of the Workflow/Process.