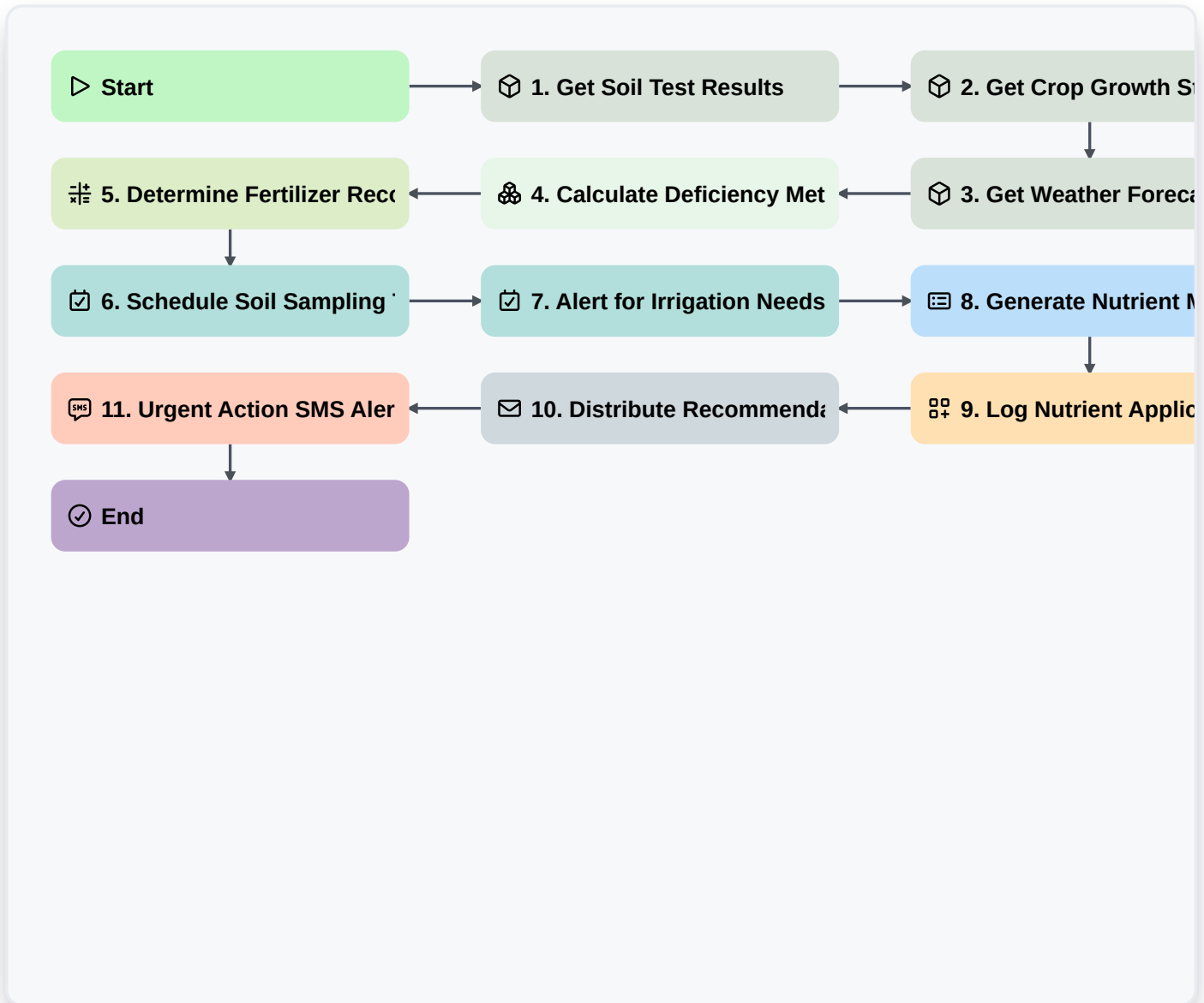


# Precision Agriculture Workflow: Streamline Farm Operations Management



▷ **Start**

Start of the Workflow/Process.

 **1. Get Soil Test Results**

Retrieve latest soil nutrient and pH readings.

 **2. Get Crop Growth Stage Data**

Fetch current growth stage and vigor index for the target crop.

 **3. Get Weather Forecast Data**

Retrieve localized weather predictions (rainfall, temperature) for the growing period.

 **4. Calculate Deficiency Metrics**

Aggregate nutrient levels across multiple sample points to identify overall deficiencies.

 **5. Determine Fertilizer Recommendation**

Execute formula based on nutrient deficit and soil type to recommend NPK ratios.

## 📅 **6. Schedule Soil Sampling Task**

Create a task for the agronomist to schedule follow-up soil testing.

## 📅 **7. Alert for Irrigation Needs**

Create a high-priority task if water stress is detected by weather/soil data.

## 📄 **8. Generate Nutrient Management Report**

Compile all data into a comprehensive, shareable nutrient application report.

## 📄 **9. Log Nutrient Application Record**

Create a new record detailing the planned or executed fertilizer application.

## ✉️ **10. Distribute Recommendation Report**

Send the final nutrient recommendation report via email to farm manager and agronomist.

## 📱 **11. Urgent Action SMS Alert**

Send immediate SMS alerts for critical issues (e.g., pest outbreak, extreme weather).

## 🏁 **End**

Start of the Workflow/Process.