

# Agricultural Resource Allocation Workflow: Smart Farm Management For Efficiency



▷ **Start**

Start of the Workflow/Process.

 **1. Get Current Field/Resource Data**

Retrieves real-time data on available resources (e.g., machinery status, labor capacity) from the relevant data models.

 **2. Aggregate Total Available Resources**

Calculates the total available resources (e.g., total man-hours, total equipment hours) from multiple data entries.

 **3. Generate Field Work Tasks**

Creates specific, actionable tasks for field personnel based on the calculated resource needs and crop requirements.

 **4. Update Task Status and Assignments**

Updates the status of created tasks (e.g., 'Assigned', 'In Progress', 'Completed') and assigns specific personnel.

### **5. Calculate Required Resource Units**

Executes formulas to determine the precise amount of resources needed for the assigned tasks (e.g., acres \* required chemical rate).

### **6. Notify Crew of New Tasks via SMS**

Sends immediate alerts (SMS) to field crew members detailing their newly assigned tasks and locations.

### **7. Send Daily Resource Summary Report**

Sends automated email summaries to farm managers detailing resource consumption and daily progress.

### **8. Generate Daily Resource Utilization Report**

Creates a structured report detailing resource allocation, usage, and any potential bottlenecks for review.

### **9. Log New Field Activity Entry**

Creates a formal record (entry) in the system for any action taken in the field (e.g., spraying, planting).

### **10. Archive Completed Task Records**

Removes or archives records for tasks that have been finalized to maintain clean historical data.

### **End**

Start of the Workflow/Process.