

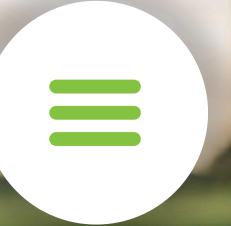
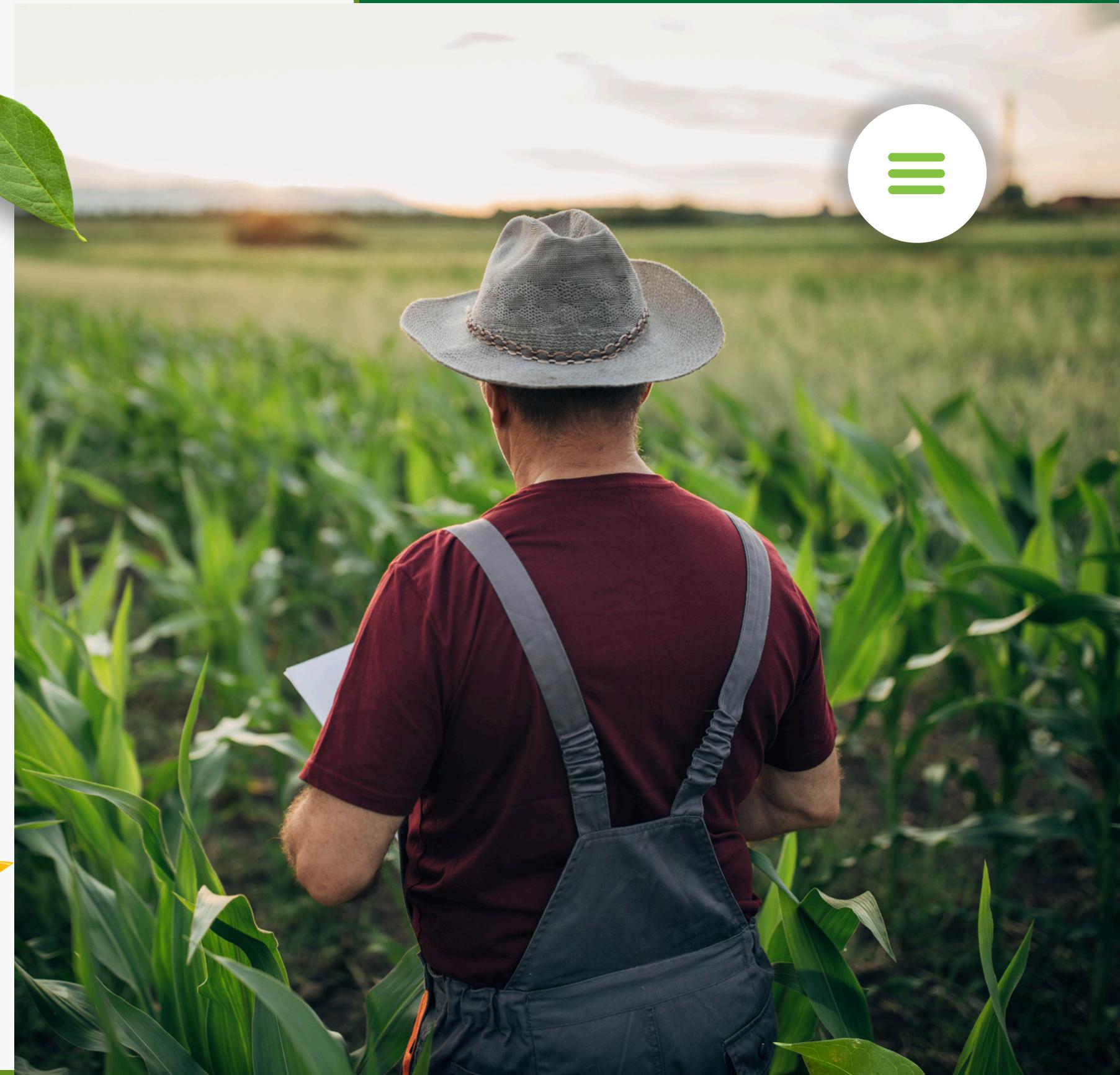


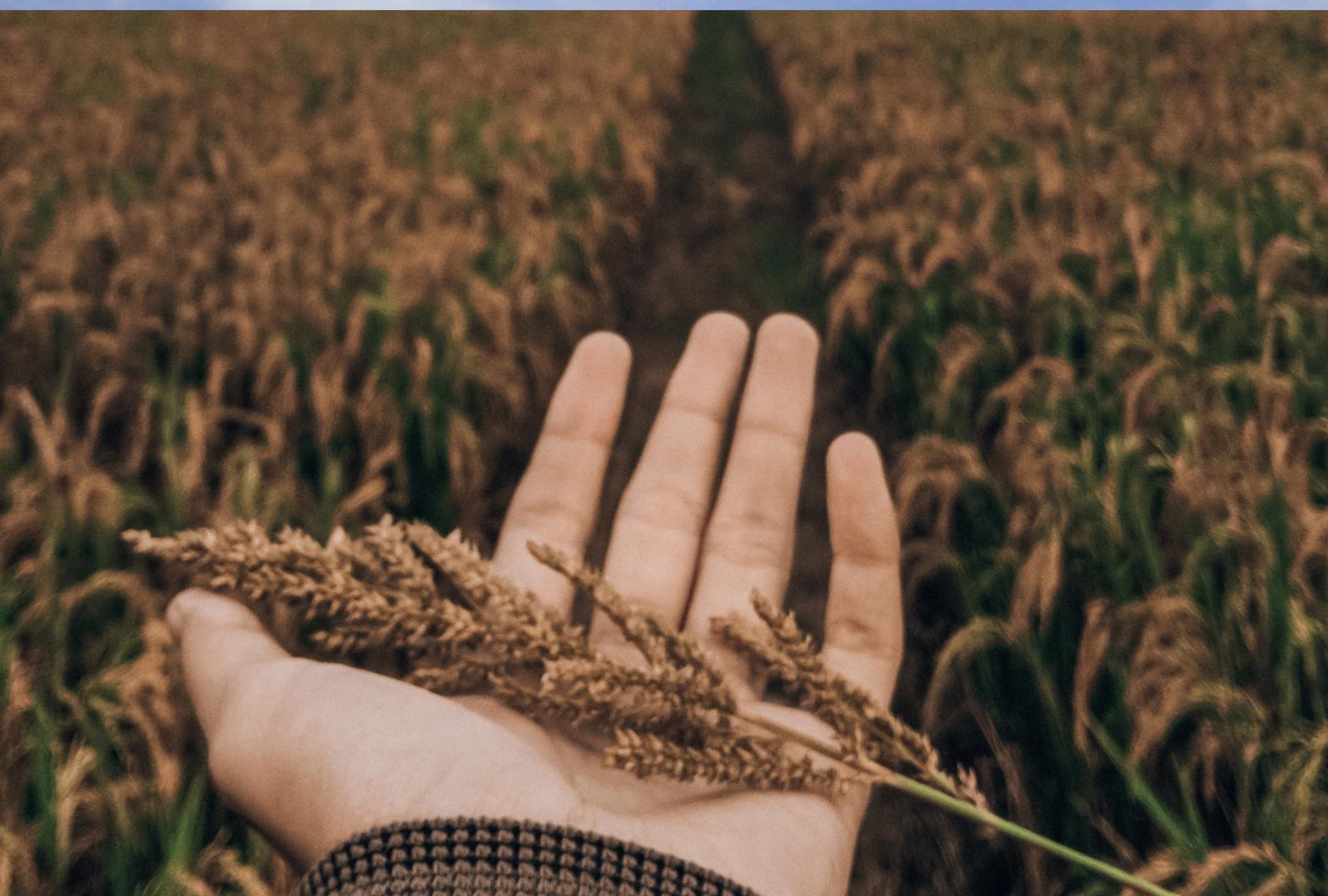
# SMARTFARM.

Advisors

# Introduction

- The SmartFarm app is designed to help farmers make data-driven decisions to enhance productivity and sustainability.
- The app collects soil data using sensors and location data via an API.
- Provides actionable recommendations on crop selection, pesticide use, and agricultural procedures.





# Problem Statement

- Farmers often lack real-time insights into their crops' health and environmental conditions.
- This leads to suboptimal yields and inefficient farming practices.
- There is a need for a system that provides timely and accurate data to inform decisions.



# Project Objective

- Increase agricultural productivity and sustainability.
- Offer a smart monitoring system for data-driven decisions.
- Provide recommendations for crop selection, pesticide use, and optimal





## goal of smartfram

The overarching goal of the SmartFarm app is to enhance overall productivity and sustainability in agriculture while simplifying farmers' decision-making processes. By offering actionable insights and personalized recommendations, SmartFarm aims to empower farmers with the tools they need to thrive in today's dynamic agricultural landscape.

# Solution Overview

- **The SmartFarm app combines sensor data and location data to offer comprehensive farming advice.**
- **Key features include crop recommendations, pesticide suggestions, and procedural guidance.**
- **Aims to improve overall productivity and ease farmers' decision-making processes.**

# Data Collection



**Soil Data:** Collected using sensors for soil moisture, temperature, and nutrient levels.

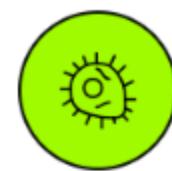


**Location Data:** Collected using a location API for accurate geographical context.



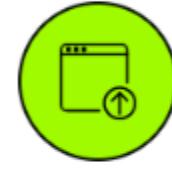
**Weather Data:** Integrated from weather APIs for environmental conditions.





### 1. Sensors Measure Soil Moisture, pH, and Nutrient Levels

Specialized sensors are utilized to accurately measure essential soil parameters such as moisture content, pH levels, and nutrient concentrations.



### 2. Real-time Data Transmission to the App

Data collected by the sensors is instantly transmitted to the Farmer Assistant App, ensuring that farmers have access to up-to-date information for timely decision-making.



### 3. Continuous Monitoring and Updates

The app provides continuous monitoring of soil conditions and delivers regular updates to farmers, enabling them to make informed decisions based on the latest data trends.

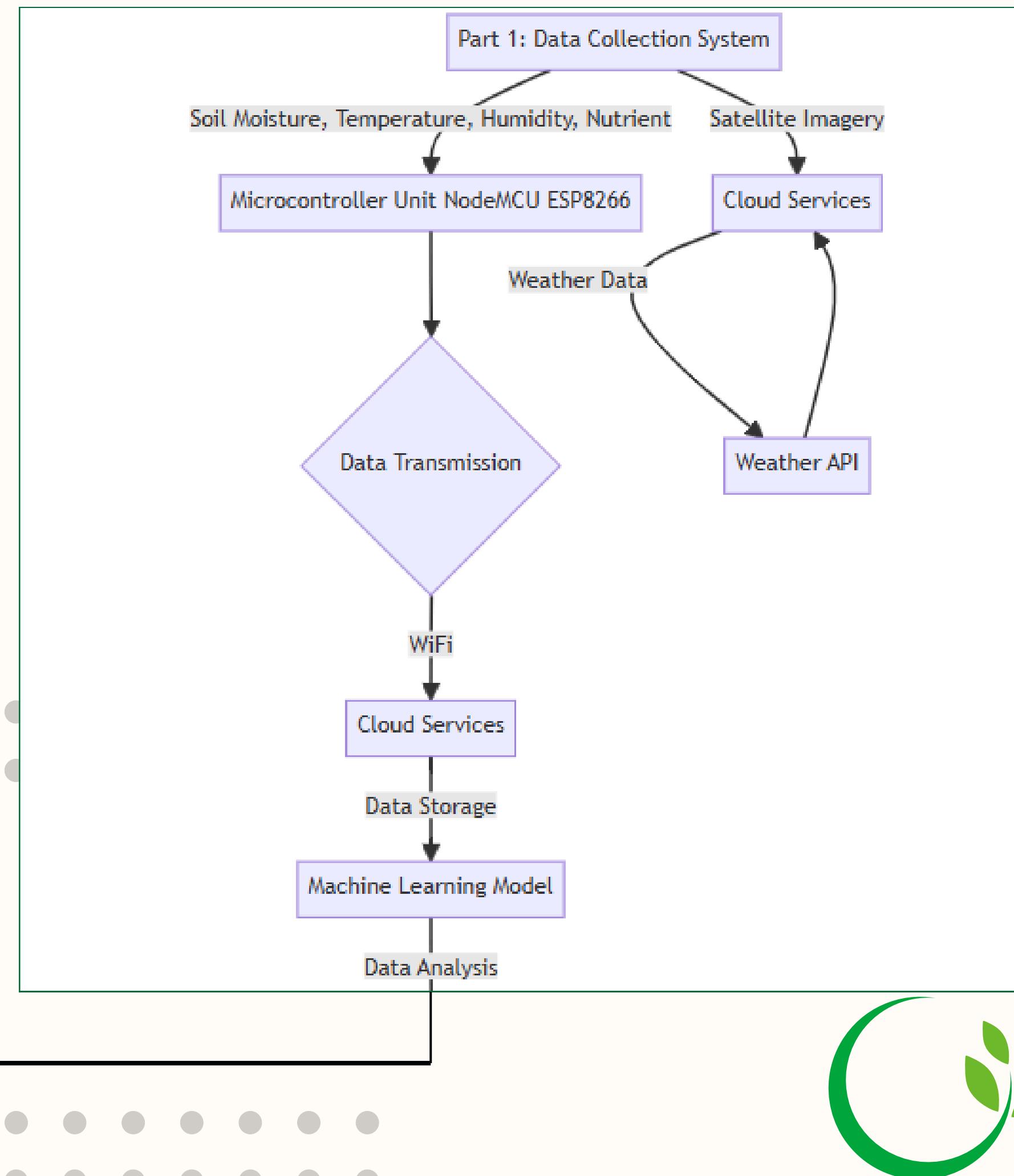
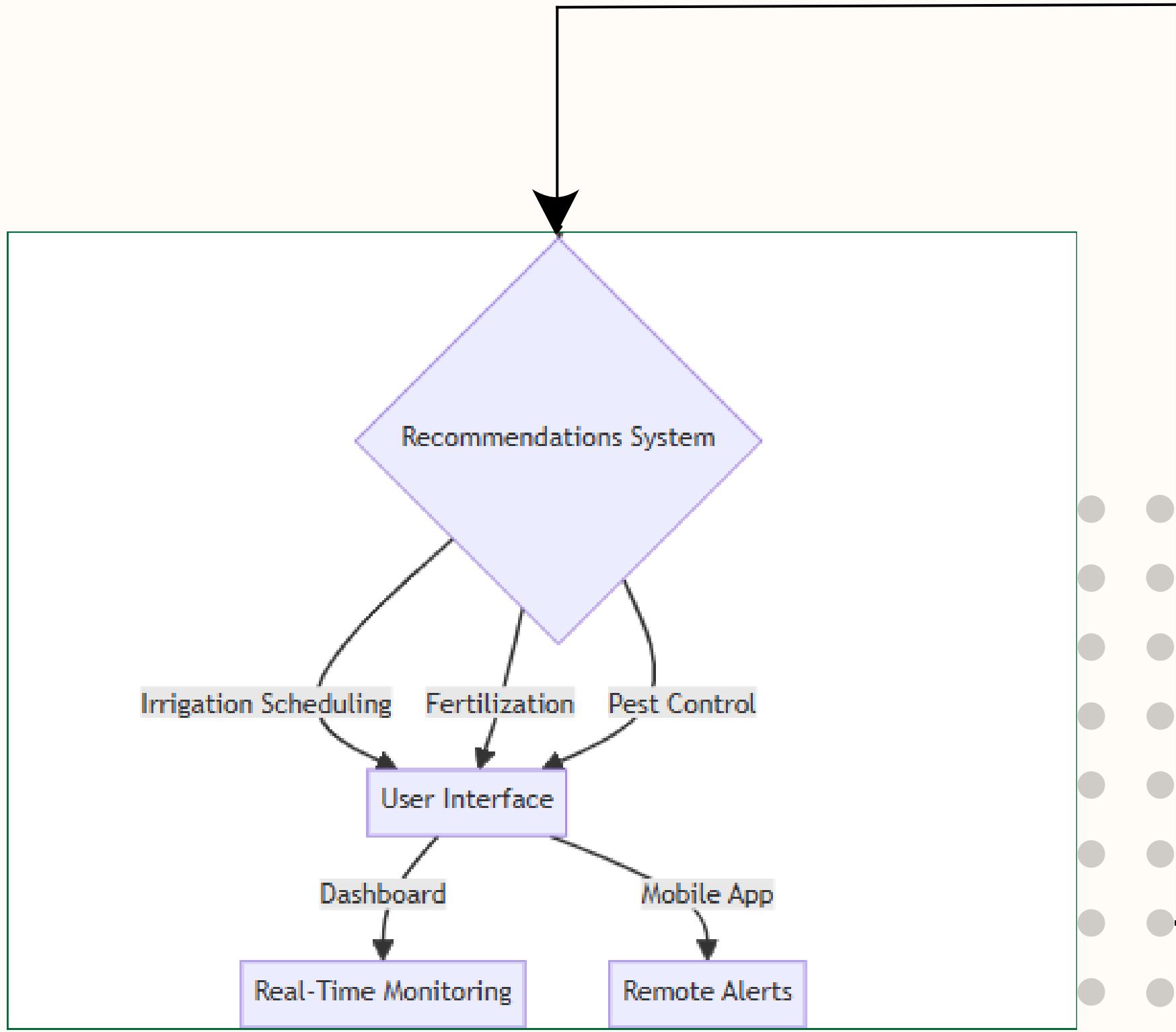
Soil Monitoring Insights

## Soil Data Collection

Enhancing Agricultural Insights with Real-time  
Soil Monitoring



# System Architecture



# Features and Functionality

**Clean and Intuitive User Interface**

**Crop Recommendations**

**Pesticide Suggestions**

**Procedural Guidance**

**Real-Time Alerts**

A close-up photograph of a field of green wheat ears. The wheat is in sharp focus in the foreground, showing its texture and color. In the background, there are rolling hills or mountains under a clear sky. The lighting suggests it might be sunset or sunrise, casting a warm glow on the horizon.

THANK YOU.