



Avishkar

# Krishirath

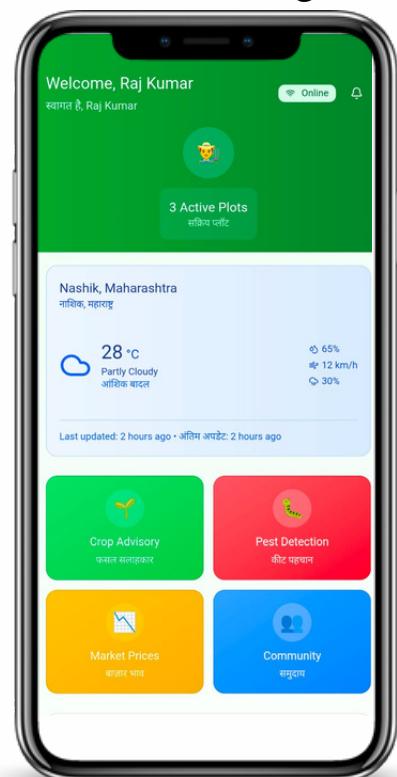
## Technology in hand, harvest in heart, that's the Krishirath promise.

### Introduction

KrishiRath invites young minds to showcase their creativity and ideas through an engaging Poster Competition. This event aims to raise awareness about **sustainable farming, modern agricultural practices, and farmer-centric innovations**. Participants will express their thoughts visually, blending art and technology to highlight solutions that empower farmers and transform agriculture for a better future.

### Actual Need

Agriculture is the backbone of India, yet farmers often struggle with limited access to timely information, market linkages, and modern practices. KrishiRath is an innovative initiative designed to bridge this gap by **providing smart, location-based agricultural advisory** to farmers.



### MVP

**Crop Recommendation -**  
Based on soil, season, and region.

**Market Linkage Info -**  
Nearby mandi prices & buyer connections.

**Pest Detection Info-**  
Analyzing and providing better image classification process.

**Multilingual Support -**  
Local language access for inclusivity.

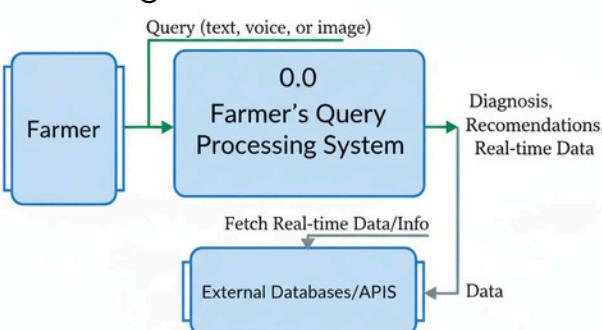
### Digital Farming Facts

**Data-Driven Decisions** - Farmers using digital tools can increase crop yields by up to 15-20%.

### Innovation

KrishiRath stands out by offering **common pest & disease alerts** at the village level. Unlike broad, generic advisories, our system detects and notifies farmers.

- Log:** Captures disease reports with village locations.
- Detect:** Identifies a cluster of cases in one area.
- Alert:** Sends a warning to all farmers in that specific village.



### Impacts

Boosts crop yield and quality with **early disease detection**.

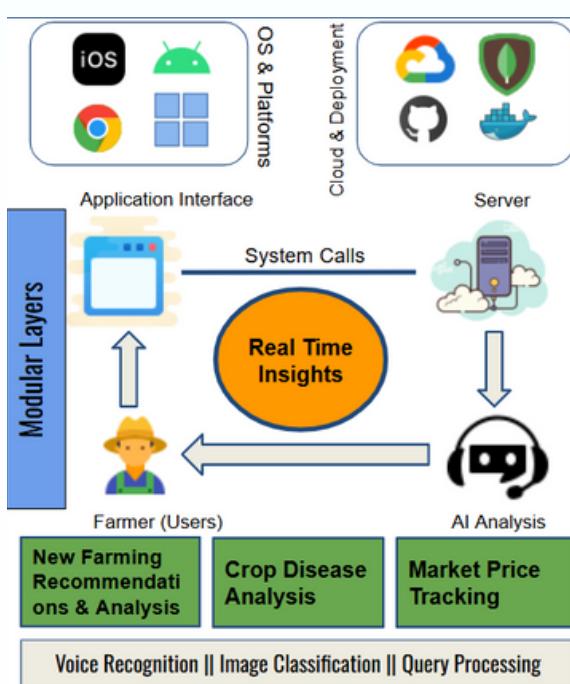
Increases farmer income through market price alerts and **reduced losses**.

Enables **smarter, data-driven decisions** for modern farming.

### Conclusion

This **AI-driven system bridges the gap between technology** and traditional farming, empowering farmers with real-time, actionable data.

### KrishiRath Architecture



The system operates on a classic **client-server architecture**. Farmers, the end-users, interact with a frontend application. This application communicates with a powerful backend server where **data processing and AI analysis** occur. The core objective is to receive queries from farmers—in the form of voice, images, or text—and return actionable intelligence related to farming, crop health, and market conditions.