Team Mauryas

SLIDE 1

KrishiBal

KRISIBAL is an AI-powered agricultural intelligence platform that helps farmers make better decisions through smart crop recommendations, instant plant disease detection, and expert AI assistance.

It combines machine learning and modern web technology to improve productivity, reduce losses, and support sustainable farming.

Category - AgriTech / AI for Agriculture

SLIDE 2

The Research

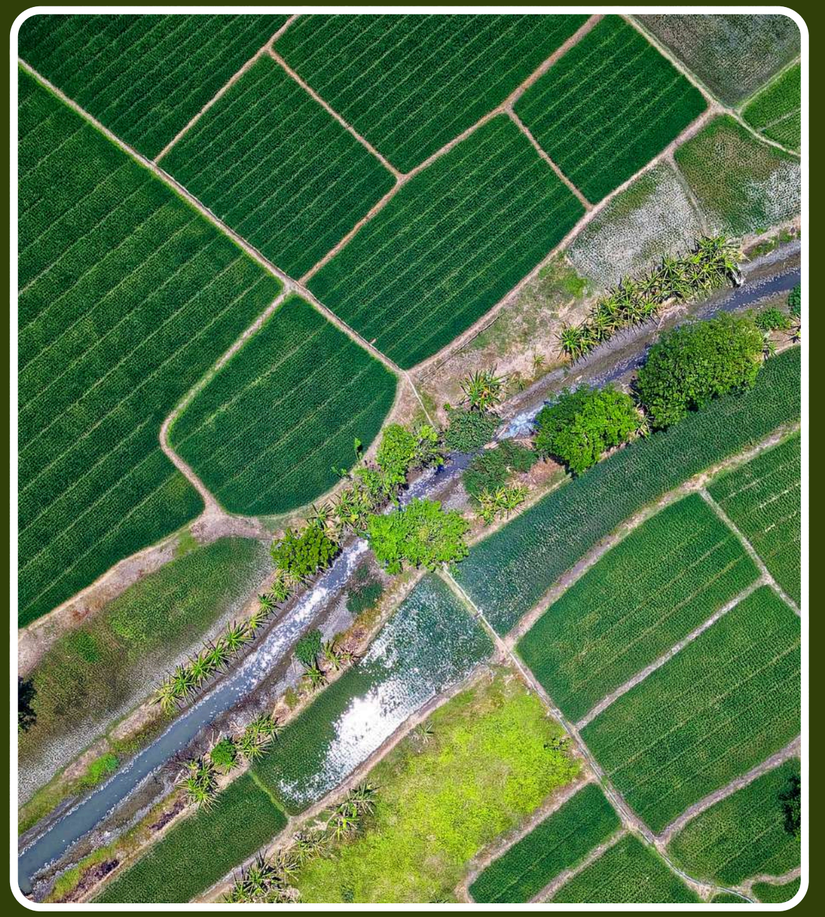
- Agriculture employs ~58% of India's workforce but contributes only ~18% to GDP (low productivity issue).
- Small farmers face challenges: lack of timely expert advice, crop diseases causing 20-40% yield loss annually.
- Pests and diseases cause Indian farmers to lose 15-30% of crops every year, worth billions of rupees (e.g., ~₹90,000 crore annually). Many small farmers rely on costly middlemen or guesswork for advice.
- Indian farmers face extreme distress: Over 10,000 farmer suicides annually (NCRB data: 10,881 in 2022, rising due to debt and crop failures) – a silent crisis driven by unpredictable yields and income.

Customer Pain Points

- No instant access to agricultural experts.
- Crop disease diagnosis is slow and inaccurate.
- Tough to get timely weather updates, loan info, or government schemes.
- Hard to buy quality seeds/inputs or sell directly to buyers – no reliable marketplace.
- Wrong crop choices for soil/climate lead to low quality and income.
- No personalized guidance from seeding to harvest – guesswork causes more losses.

The Problem

- **Social inequality**: Rural-urban divide widens as uneducated farmers lack access to modern tools, leading to generational debt and migration to cities.
- **Environmental damage**: Over-reliance on chemicals from wrong advice pollutes soil/water, accelerating climate vulnerability for future generations.
- **Tech gap**: No unified AI platform exists for end-to-end support – from seed to sale – leaving farmers isolated in a $400B+ industry ripe for disruption.
- **Language Barrier**: Most digital tools are only available in English, excluding many farmers.



Solution

SLIDE 5

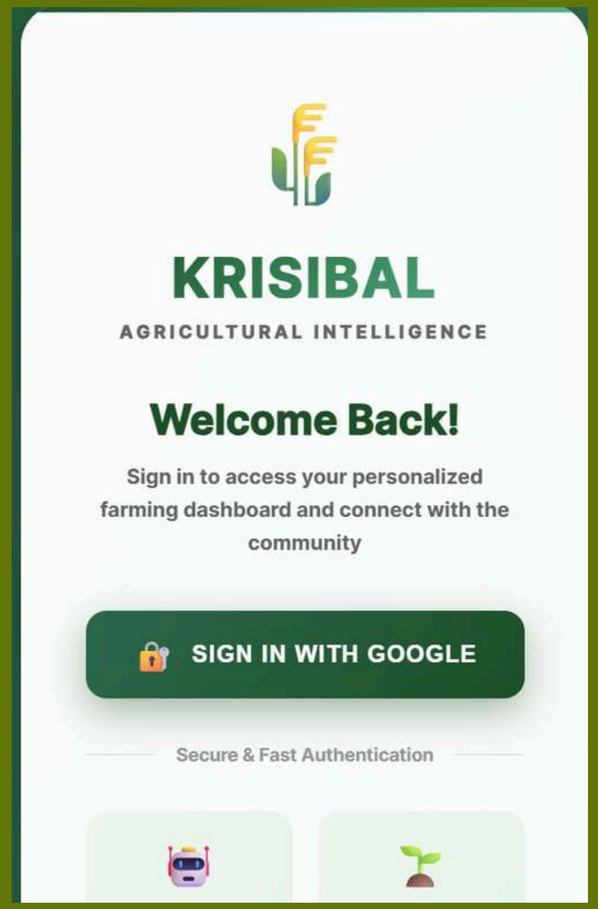
Let’s Solve

KRISIBAL provides an integrated web-based agricultural intelligence solution that combines artificial intelligence, data analysis, and cloud technology to support farmers in decision-making. The platform enables users to interact with an AI assistant for farming-related queries, analyze crop diseases through image uploads, receive crop recommendations based on location and season, and access real-time weather information. By bringing these capabilities together within a unified system supported by a secure backend and cloud database, KRISIBAL replaces fragmented agricultural tools with a single, intelligent platform designed for practical agricultural use.

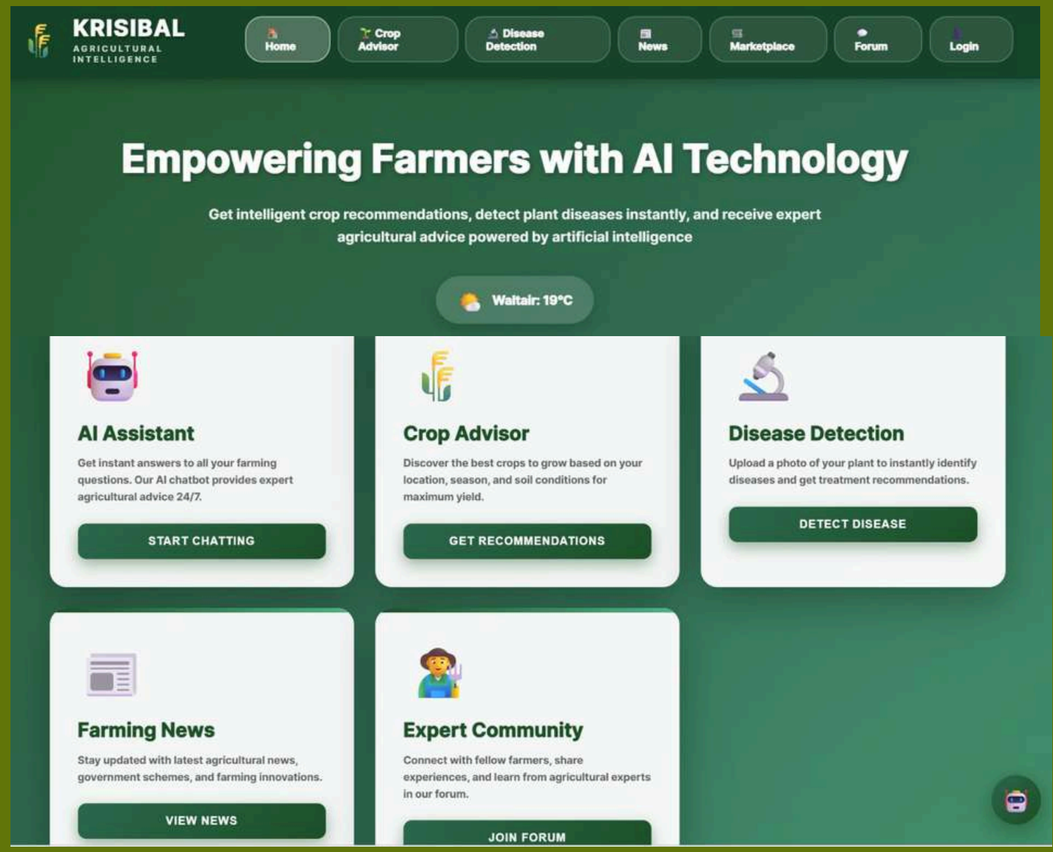
What We Offer - Agricultural Intelligence

- AI Chatbot / Audiobot
- News And Govt. Schemes
- Crop Recommendation
- Disease Detection
- Built-in Marketplace
- Live Weather Update
- Yield Prediction
- Full Season Guidance

Platform Preview

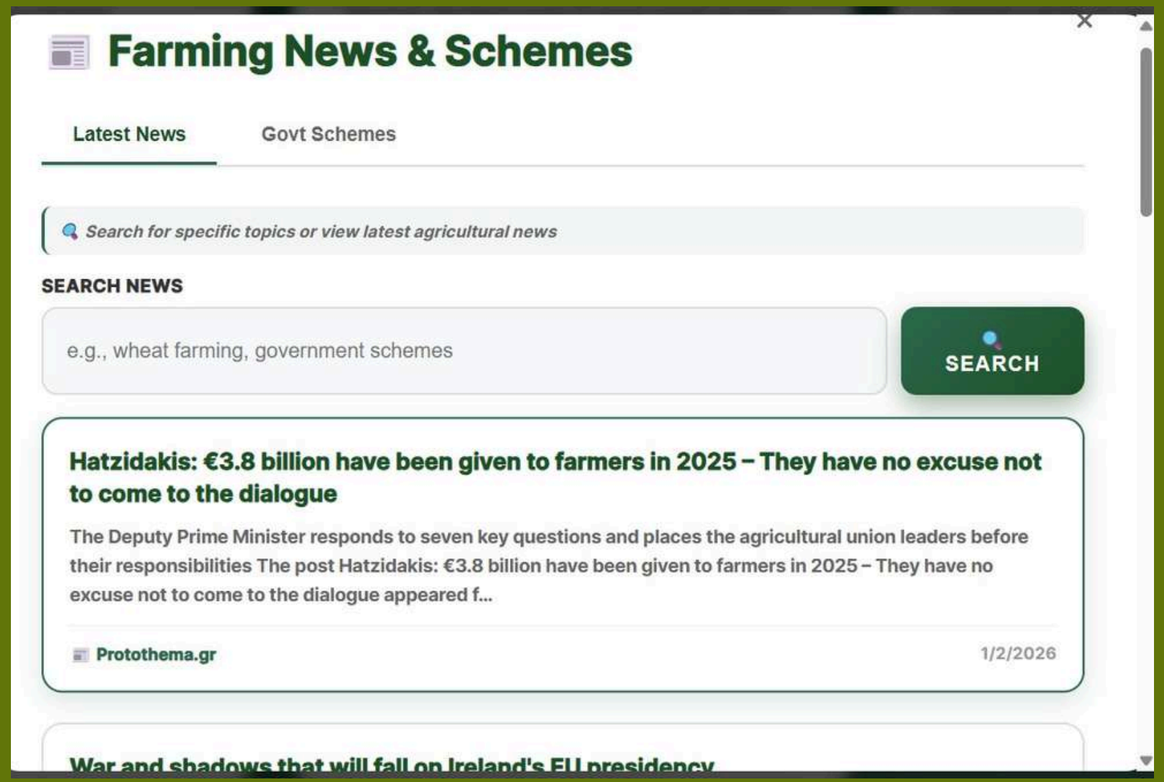


Login page

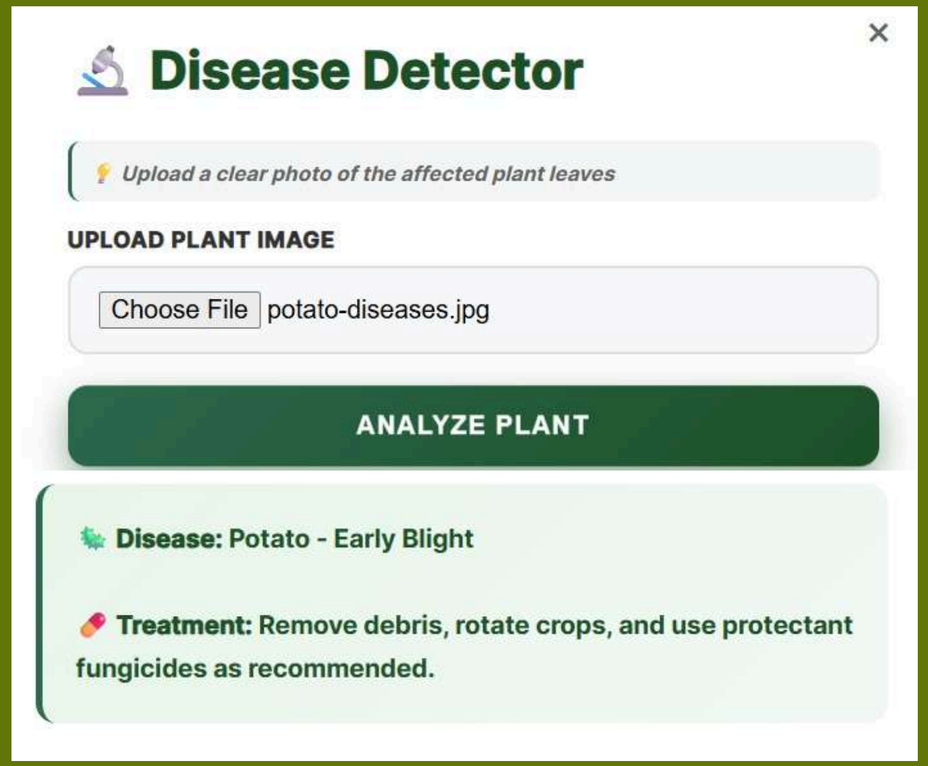


Home page

Platform Preview

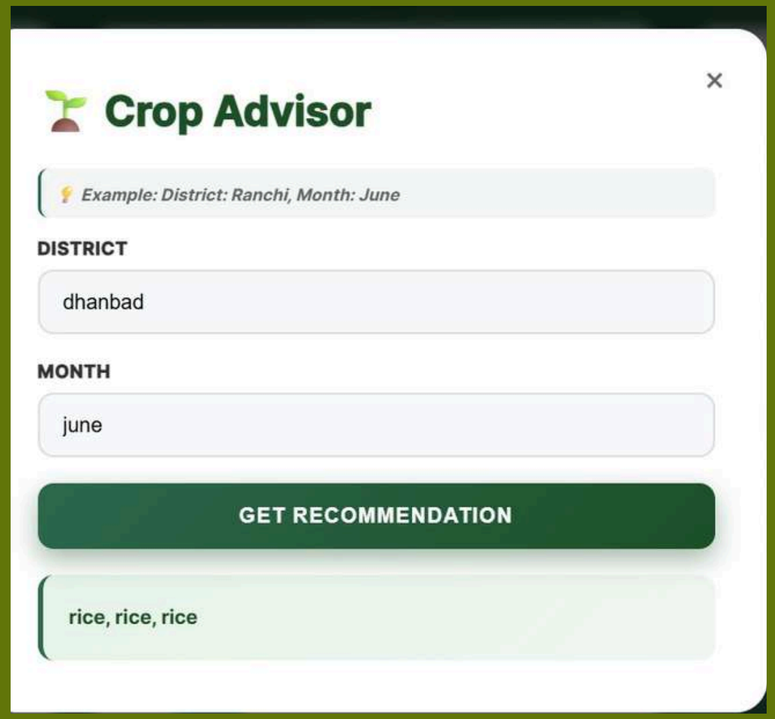


Farming News

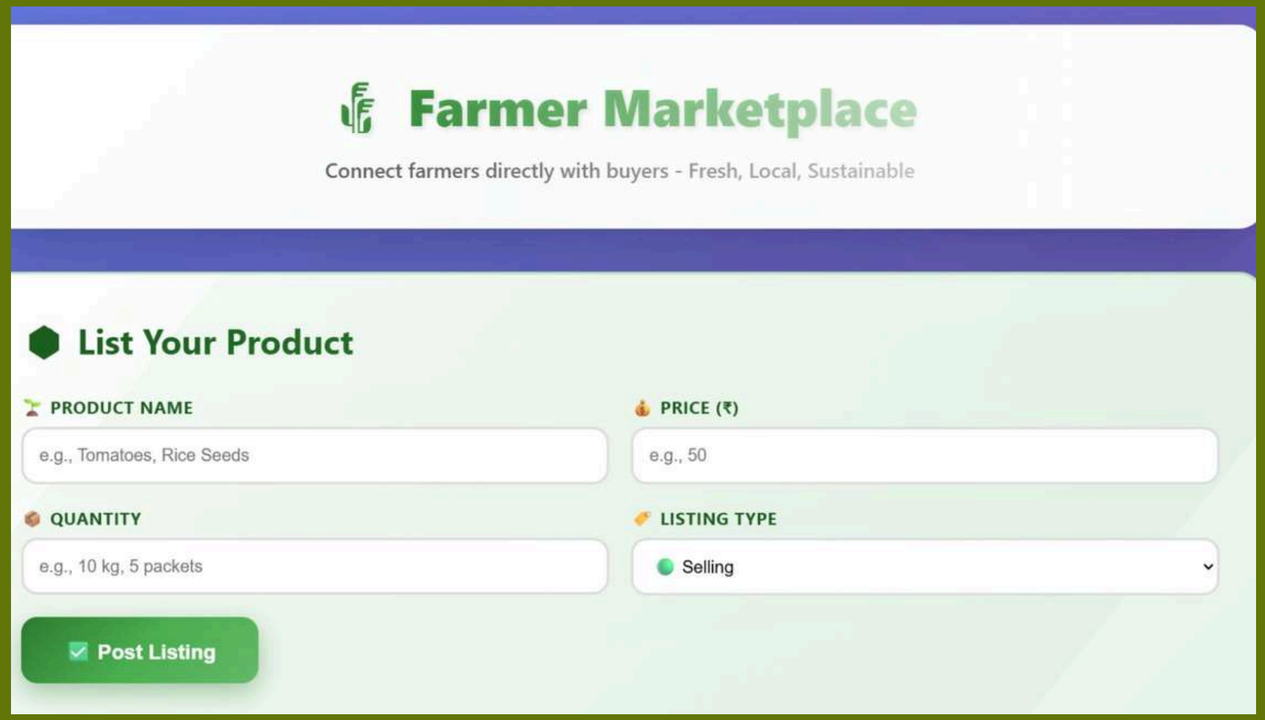


Disease Detector

Platform Preview

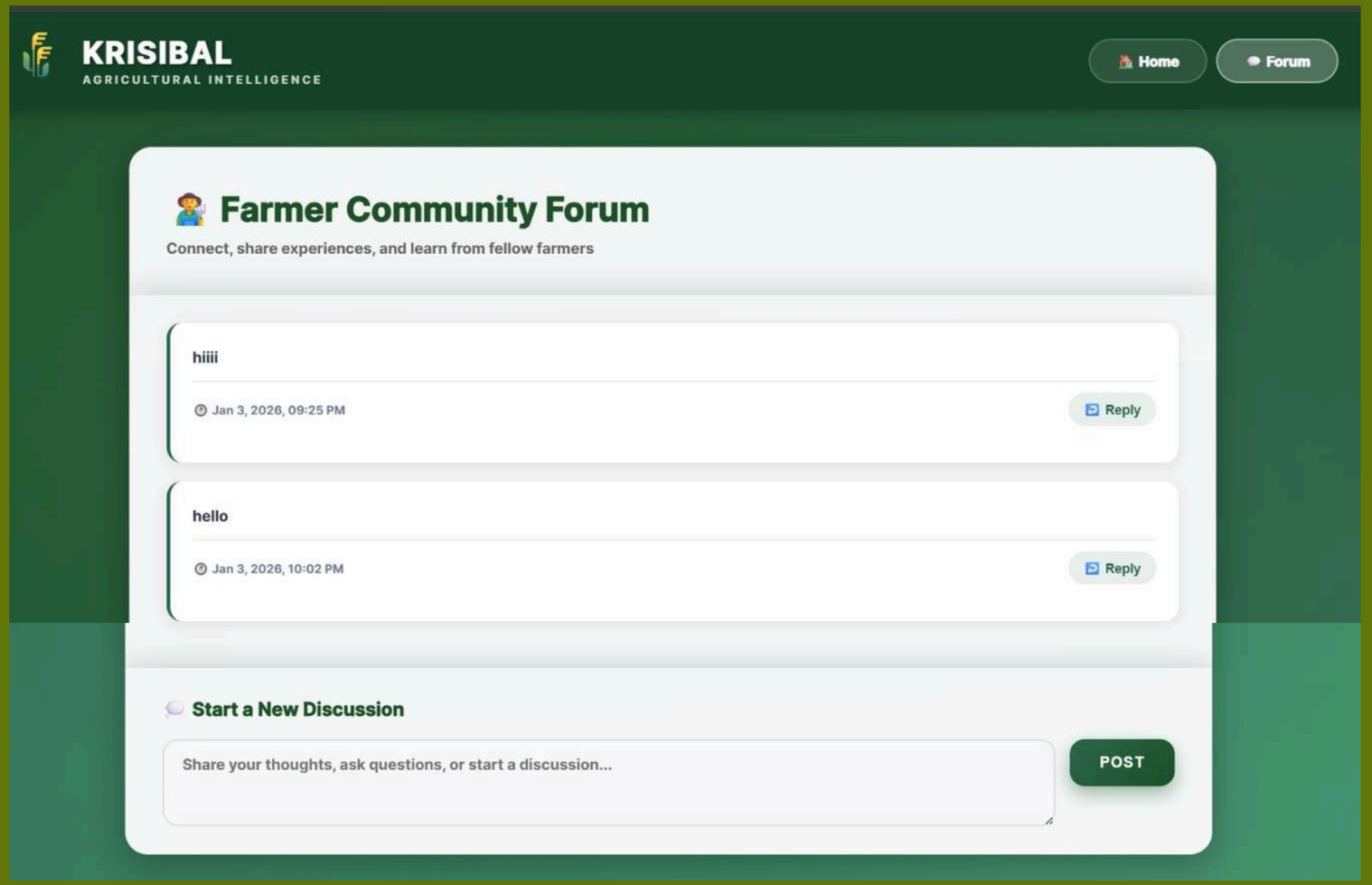


Crop Recommendation System

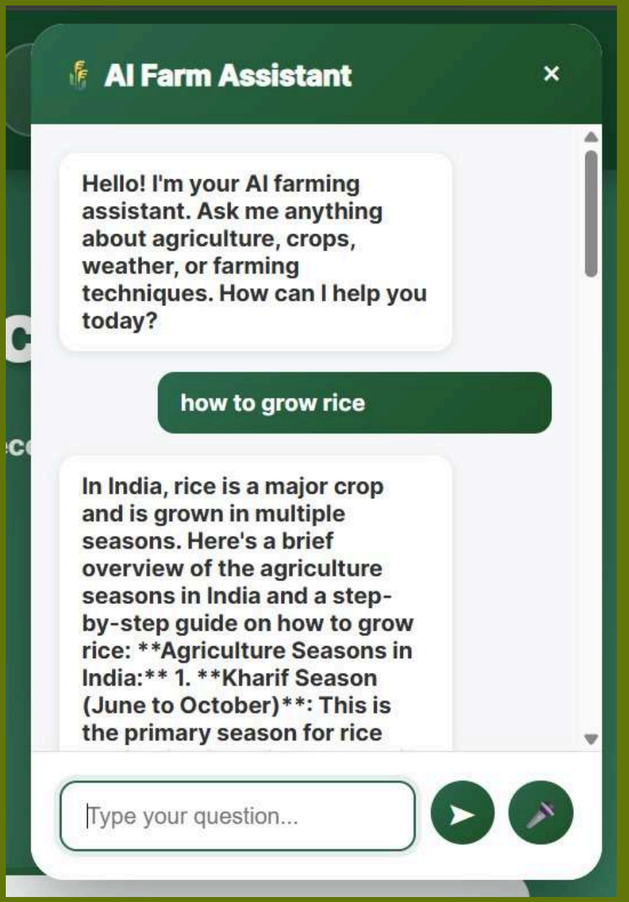


Marketplace

Platform Preview



Forum



Chatbot

Use Cases

- Farmer uploads photo of wilting leaves → AI detects "Bacterial Blight" → Suggests organic remedy + when to apply.
- Farmer in drought area gets drought-resistant crop suggestions.
- New farmer inputs location/soil → Gets recommendations: "Grow Turmeric (high profit) or Rice (low risk)".
- Village cooperative can use chatbot for seasonal and future planning.

Customer Value proposition

- For Agri-Businesses: Better supply chain planning and farmer engagement.
- For Farmers: Increase yield, reduce losses, save time, and make data-driven decisions.

Our Product

- Built using Flask, Firebase & AI models
- Scalable and cloud-ready
- Designed for real-world agricultural use

Market Size Estimation

- India has 140+ million farmers
- Smartphone penetration increasing rapidly
- Pilot Regions: India, Kenya, Nigeria
- TAM (Total Addressable Market): Global AI in agriculture market projected to reach ~$13 Billion by 2033.
- SAM (Serviceable Addressable Market): India's AI in agriculture market, valued at $70 Million in 2024 and growing fast.
- SOM (Serviceable Obtainable Market): Focus on specific regions or types of smallholder farmers initially.

Video Prototype - https://drive.google.com/file/d/1yBJWRilwxz3_638vDrqPnP7FanAqv_5f/view?usp=sharing

Thank You!

Let’s grow a greener future together!

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