

KrishiMitra

The Smart Farming Companion

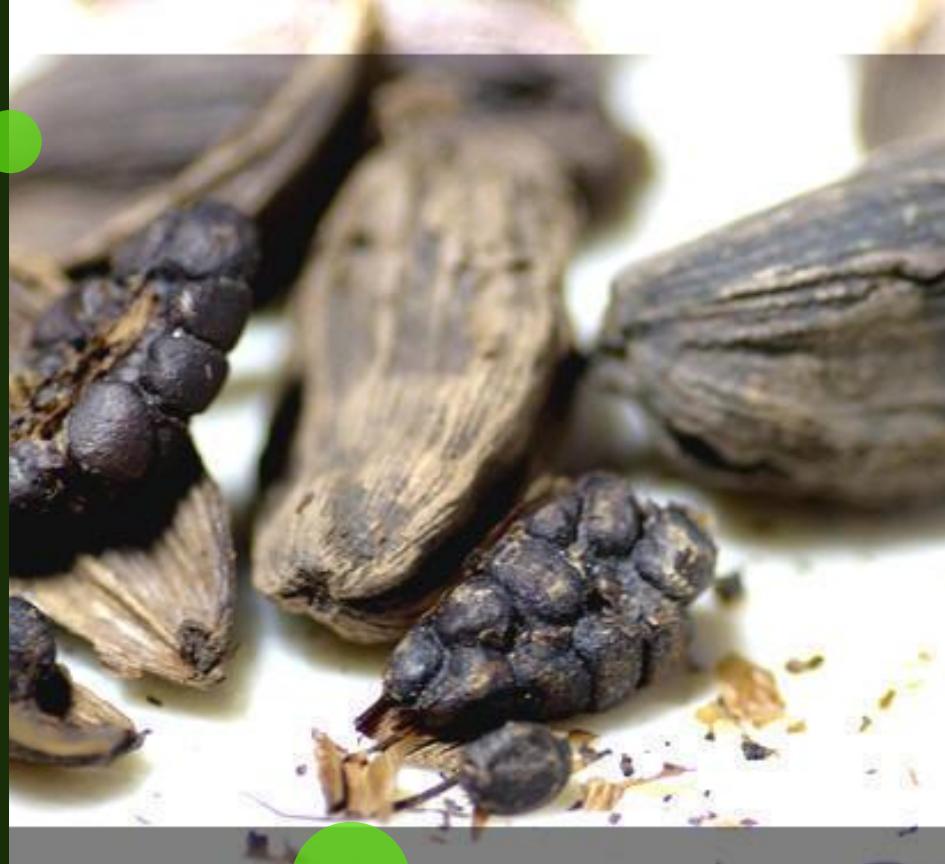
A Cardamom Farming Assistant powered by GenAI to detect
disease, provide treatment plans and improve crop yield.

Team: Data Gurkhas

Problems

Cardamom farmers face high losses due to late disease detection and knowledge gap.

- 30-40% yield loss due to diseases(like [Capsule rot](#))
- Misuse or overuse of pesticides
- Limited access to expert agricultural guidance





Our Solution

A practical GenAI-powered farming assistant accessible via WhatsApp, voice & mobile app.

- Image-based disease detection
- Personalized GenAI treatment plans
- Nepali voice assistant (Transcribe + Bedrock)
- Weather-based disease risk alerts
- Market price timing recommendations

Architecture

End-to-end AI workflow using AWS services.

S3 → Image storage

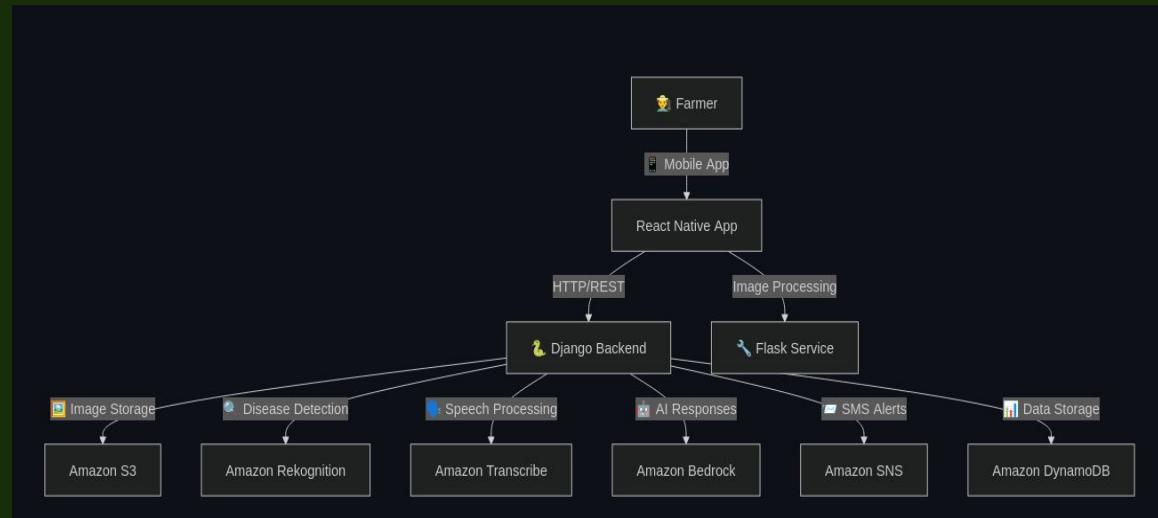
Amazon Bedrock → GenAI reasoning & vision

Amazon Rekognition → Preprocessing

Amazon DynamoDB → Data Storage

Transcribe → Nepali speech-to-text

SNS → SMS alerts





Benefits and Impact

Our solution delivers measurable impact, transforming traditional farming with unique, GenAI-driven capabilities that set us apart.

- Decreases crop loss through early intervention
- Boosts farmer income through smarter market timing.
- Get simple, actionable farming advice in local language

Our Vision

- Make Intelligent farming assistance available to every simple farmers
- Start with cardamom and expand to other crops like cauliflower and potato.
- Bridges the gap between technology and rural agriculture.

Thank You!

