Vistaar BOT at 11:19

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Vistaar BOT

What can this bot do?

िविस्तार आपका कृषि साथी है जो संभावनाओं की दुनिया पेश करता है। (Vistaar is your agricultural companion offers a world of possibilities.)

न पाठ्यक्रमों का अन्वेषण करें | (Explore courses)

ार्किफसल संबंधी जानकारी प्राप्त करें | (Get crop insights)

📋 कार्य प्रबंधित करें| (Manage tasks) 🗾 राय देने | (Provide feedback) 💬 या बस हमसे कुछ भी पूछें! | (Or simply ask us anything!)

Introduction to Digital Green's Product Offering

15 years of success digitizing extension delivery



- Digital Green has trained over 54,000 government extension agents to create and share local farmer videos, to augment the model of existing government extension systems.
- Through this network of extension agents, over **5.2 million smallholder farmers (70% women)** have received improved extension advisory services
- Our approach has proven impact:
 - Brings the average cost per adoption reduced from \$35 to \$3.50/farmer/practice.¹
 - Increases farmer income by up to 24%²

1: Baul, Tushi, Dean Karlan, Kentaro Toyama, and Kathryn Vasilaky. "Improving Smallholder Agriculture via Video-Based Group Extension." Global Poverty Research Lab, n.d. https://doi.org/10.2139/ssrn.4307353

2: Abate, Gashaw T., Tanguy Bernard, Simrin Makhija, and David J. Spielman. "Accelerating Technical Change through ICT: Evidence from a Video-Mediated Extension Experiment in Ethiopia." World Development 161 (January 1, 2023): 106089. https://doi.org/10.1016/j.worlddev.2022.106089



How can we increase the speed and effectiveness of extension systems?

Current Farmer.Chat user base

INDIA KENYA







NIGERIA

ETHIOPIA



Bihar, Uttar Pradesh, Orissa Madhya Pradesh, Rajasthan, Jharkhand ~5000 EA users 20 commodities Kirinyaga, Meru, Murang'a, Nakuru, Nandi, Nyeri, Uasin Gishu ~5000 EA users 8 commodities Niger, Kaduna, Cross River, Benue, Kebbi, Ebonyi

Upcoming (April)

Amhara, Oromia, Sidama, Central Ethiopia, South and SW Ethiopia ~400 EA users

Goal: $$35 \rightarrow 0.35 per farmer adoption 100x more cost effective

Network tech stack



Goal: Establish benchmark and achieve 90%+ performance scores

In recent tests using GPT4-Turbo reranking, we reduced responses with hallucinations from 23% to 0% and responses with irrelevant information from 37% to 3%; responses were 65% faster but cost 6x more.

A Digital Extension Platform



Join Us in the Success of Farmer.Chat

Successful AI interventions require support from well-intentioned, competent people or organizations.

We are looking for collaboration with:

- **Technology Partners:** Contribute to the development and training of the AI language model which powers Farmer.Chat
- **Subject Experts:** Leverage your expertise to contribute to the accuracy and validity of the advisory Farmer.Chat delivers
- **Contribute Content:** Contribute data such as soil, weather and market data
- Voice Sampling: Enrich the datasets used to train AI in language learning with audio recordings of diverse speakers, languages, and dialects



An AI Assistant for Extension Agents

Personalized, on-demand, localized advisory to Extension Agents with push & pull content

Multimedia interface with text, voice, video and image messages.

Building farmer and Extension Agent **profiles & data**

To better reach **women**, low-literacy, low digital skill, and off-line farmers

Core Functionality of Farmer.Chat

- **Tailored Advisory:** The system leverages a variety of data sources to tailor advisory to best suit user needs.
 - User Profiles: Digitizing user names, locations, gender, contact information, and farm level data
 - **Crop Calendar:** Leverage approved crop calendar to create tailored advisory based on seasonality and best practices
 - **Soil & Weather:** Location data informs the system in referencing soil and weather data to customize advisory
- **Text and Voice Queries:** Users can ask queries via text messages and voice messages in a variety of languages
- **Multimedia Responses:** Users receive both text, audio and link out to video responses relevant to their queries
- **Image Analysis:** Photos submitted by users can be analyzed to identify crop and livestock pests, diseases, and other problems









