

Agro-Advisory LLM System: MVP Scope Document (Rewa District, Madhya Pradesh)

1. Target User Profile - **User:** Smallholder farmers in Rewa District - **Tech Access:** Smartphone users (Telegram/WhatsApp) - **Language:** Hindi (Voice/Text) - **Literacy Level:** Basic or illiterate

2. Supported Crops (Phase 1) - **Wheat (Rabi Season):** High acreage, MSP coverage, irrigation focus - **Rice (Kharif Season):** Rain-fed, pest management critical

Query	Types	Supported	Category	Example Query
----- -----			Sowing Advice	"Gehu ki bony kab karni chahiye?"
	Weather Forecast	"Agle hafte baarish hogi kya?"		Soil/Fertilizer Advice
				"Mere khet ki mitti ke liye kya khaad sahi hai?"
	Pest Management	"Gehu mein peela rog ka ilaaj kya hai?"		
				Mandi Prices
	"Rewa mandi mein gehu ka daam kya hai?"			
	Government Schemes	"PM-Kisan ke liye kaise apply karein?"		
	Best Practices	"Rewa mein gehu mein sinchai kitni baar karni chahiye?"		

4. Language & Interfaces - **Input:** Hindi voice or text - **Output:** Hindi text + voice (TTS) - **STT:** Whisper / MMS - **TTS:** Coqui TTS / Google Cloud TTS - **Interface:** Telegram Bot (Phase 1), WhatsApp (later)

5. Geographic and Temporal Scope - **Region:** Rewa District (Madhya Pradesh) - **Granularity:** Block/Village (if GPS or metadata is available) - **Time Scope:** Current cropping season - **Weather Scope:** Next 7-day forecast

6. Knowledge Base (Phase 1 Content) - **Crop Guides:** Wheat & rice sowing/harvest advisories from KVK/ICAR - **Weather Data:** 7-day forecast via OpenWeatherMap - **Soil Data:** Block-wise soil pH, NPK levels from Soil Health Portal - **Market Prices:** Wheat & rice mandi prices from Agmarknet - **Pest & Disease:** Common issues and treatments for wheat/rice - **Government Schemes:** PM-Kisan, MP State fertilizer subsidy - **Media:** 2-3 YouTube videos (transcribed and chunked)

7. Out of Scope (MVP) - English-language support - Real-time IVR or call center interface - Insurance or credit advisory - Multi-state support - Advanced crop economics

Objective: To enable Hindi-speaking farmers in Rewa district to ask agricultural questions (by voice or text) and receive localized, accurate, and timely advisory through a Telegram-based chatbot integrated with a retrieval-augmented LLM system.