

Cohere Agriculture AI Projects - 7 Day Plan

PROJECT GOALS (Week of Jan 16-22, 2026)

Target: Cohere Applied AI Engineer (Agentic Workflows) via agriculture demos

Project	One-liner Demo	Live URL Goal
1. Ag RAG Agent	"Query 10k field trials: 'Best NPK for corn in Dubuque sandy loam?' → cited answer in 2.1s"	vercel.app/ag-rag
2. Crop Agent	"Plan 500ac rotation maximizing ROI given weather + futures" → full calendar + budget	vercel.app/crop-agent

DAILY SCHEDULE (22 hrs total)

Day 1-2: Ag RAG Agent (7 hrs)

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Day 1 (4 hrs): Core pipeline

- ✓ [] Cohere API key (cohere.com → free tier)
- ✓ [] Kaggle corn trials CSV → 20 soil/nutrient PDFs
- ✓ [] embed-english-v3.0 → Pinecone free tier
- ✓ [] Streamlit chat: query → retrieve → Command-R+ → citations

Fork: <https://theunwindai.com/p/build-a-rag-agent-with-cohere-r>

Day 2 (3 hrs): Ag polish + deploy

- ✓ [] PII/chemical name guardrails
- ✓ [] UI: soil test upload → fertilizer recs
- ✓ [] Vercel deploy → QR code in README

Day 3-5: Crop Planning Agent (9 hrs)

text

Day 3 (3 hrs): Agent skeleton

- ✓ [] LangGraph ReAct → Cohere Tool-Use API
- ✓ [] Mock tools: NOAA weather, CME futures CSV
- ✓ [] Test: "500ac corn plan for zip 52003"

Day 4 (4 hrs): Production features

- ✓ [] LangSmith traces (free tier)
- ✓ [] Multi-turn: "Also check soybean rotation"
- ✓ [] Error handling + fallbacks

Day 5 (2 hrs): Deploy + metrics

- ✓ [] Vercel #2 → live demo
- ✓ [] Benchmark: 92% accuracy vs extension service

Day 6: Portfolio (2 hrs)

text

- ✓ [] GitHub READMEs w/ architecture diagrams
- ✓ [] 60-sec Loom demos (upload soil test → watch magic)
- ✓ [] Metrics screenshots (Cohere dashboard, LangSmith)

Day 7: Launch (2 hrs)

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LinkedIn x2 posts → 500+ agtech views expected

- ✓ "Cohere RAG analyzes 10k trials → 92% yield accuracy"
 - ✓ "500ac crop plan in 43s via Cohere agent"
- #PrecisionAg #AgTechJobs #CohereAI



TECH STACK (Copy-paste ready)

text

CORE (both): Cohere Command-R+, embed-v3.0, Pinecone free

RAG: Streamlit → Vercel

AGENT: LangGraph + LangSmith (free tiers)

DATA: Kaggle trials + synthetic soil PDFs (1hr prep)

TOOLS: Mock NOAA/CME + NPK calculator (UMN formulas)



SUCCESS CRITERIA

text

RAG: >90% accuracy, <3s latency, citations work

AGENT: 5/5 scenarios complete, traces visible

DEPLOY: Both live on Vercel w/ QR codes

POSTS: 300+ LinkedIn impressions, 3+ recruiter DMs



INTERVIEW PROOF

Say this: *"After studying precision ag's \$12B market, I built Cohere systems cutting field trial analysis from 4hrs→27s at 92% accuracy vs extension baselines using your Command-R+ Tool-Use API."*

PRINT THIS → STICK ON WALL → CHECK OFF DAILY 

Total time: 3-4hrs/night. Start Day 1 with unwind.ai RAG tutorial = 80% done already.