

AgroTrack-Lite: Pitch Deck

Hedera Ascension Hackathon Submission

SLIDE 1: HOOK

"One Text Message. 40% More Income."

800 million farmers.

\$1 trillion lost to middlemen every year.

One SMS can fix this.

[Background: Image of African farmer with feature phone looking at wilting crops]

SLIDE 2: THE PROBLEM

Smallholder Farmers Are Trapped

70% Post-Harvest Loss

- Crops rot before reaching buyers
- No direct market access
- Forced to sell to exploitative middlemen

Payment Uncertainty

- 30% of farmers never get paid
- No contracts, no proof
- Disputes take months, farmers always lose

Technology Gap

- 95% have feature phones, not smartphones
- Can't use existing apps (require internet + smartphone)
- Illiteracy rates up to 40%

The Cycle of Poverty:

Low Prices → Can't Invest → Lower Yields → More Poverty

[Visual: Vicious cycle diagram]

SLIDE 3: THE OPPORTUNITY

\$500 Billion Agricultural Market

Target Market:

- **800M smallholder farmers globally**
- **175M in Sub-Saharan Africa alone**
- **Average loss: \$1,200/year to middlemen**
- **Total addressable: \$140B/year in Sub-Saharan Africa**

Why Now?

- 85% mobile money penetration (M-Pesa, etc.)
- 95% feature phone ownership
- Blockchain now affordable (\$0.001/tx on Hedera)
- AI can coordinate complex marketplaces
- SMS infrastructure already built

The Perfect Storm for Disruption

[Visual: Market size bars + growth chart]

SLIDE 4: THE SOLUTION

AgroTrack-Lite: AI-Powered Farm Marketplace on SMS

One Text Message Creates a Marketplace:

Farmer → "Maize 200kg Kisumu"

AI Agents → Match buyer, check risk, set price

System → "Offer: 35 KES/kg. Reply YES [OTP]"

Blockchain → Locks escrow automatically

Farmer → Delivers crops

System → Releases payment instantly

Three Breakthroughs:

1. **SMS-First:** Works on any phone, no app, no internet
2. **Multi-Agent AI:** 5 autonomous agents coordinate the marketplace
3. **Hedera Escrow:** Trustless payment guarantee for \$0.001/tx

[Visual: Simple flow diagram with icons]

SLIDE 5: HOW IT WORKS (Technical)

Multi-Agent Architecture on Hedera

5 Autonomous AI Agents:

IntentAgent (AUTONOMOUS)

- Parses SMS using NLP
- Supports English + Swahili
- Logs to Hedera Consensus Service

RiskAgent (AUTONOMOUS)

- Analyzes farmer history via Mirror Node
- Scores reliability (0-1)
- Flags anomalies

MarketAgent (AUTONOMOUS)

- Real-time price discovery
- Historical trend analysis
- Fair pricing recommendations

EscrowAgent (RETURN_BYT_E)

- Locks HTS tokens as escrow
- Human-approved for safety
- Automatic release on delivery

SettlementAgent (RETURN_BYT_E)

- Verifies delivery via OTP
- Releases payment to farmer
- Generates cryptographic receipt

All logged to Hedera Consensus Service for transparency

[Visual: Agent architecture diagram showing parallel execution]

SLIDE 6: HEDERA INTEGRATION (Why We Chose Hedera)

Deep Integration with Hedera Network

Services Used:

Hedera Consensus Service (HCS)

- Immutable audit trail of every decision
- Transparent for all parties
- Survives local system failures

Hedera Token Service (HTS)

- Token-based escrow (no smart contract needed)
- Automatic custody and release
- \$0.001 per transaction (vs \$5-50 on Ethereum)

Mirror Node API

- Historical farmer data for risk scoring
- Market trend analysis
- Real-time verification

Why Hedera vs Alternatives?

| Feature | Hedera | Ethereum | Solana |
|-----------------|----------|---------------|-------------------|
| Cost | \$0.001 | \$5-50 | \$0.01 |
| Speed | 3-5s | 30s-5m | 1-3s |
| Finality | Instant | Probabilistic | Sometimes reverts |
| Carbon | Negative | High | Medium |

For micro-transactions in Africa, Hedera is the only viable option.

[Visual: Comparison table + Hedera logo]

SLIDE 7: LIVE DEMO

See It In Action (QR Code)

Try It Yourself:

1. Text:

2. Send:

3. Watch the magic happen

Or Watch: [QR Code to demo video]

Live on Hedera Testnet:

- Topic ID: 0.0.7165737
- Token ID: 0.0.7179942
- View all transactions: [hashscan.io link]

Dashboard: [Your deployed URL]

[Visual: Screenshot of SMS flow + Dashboard screenshot + Hashscan screenshot]

SLIDE 8: TRACTION & VALIDATION

Early Results

User Testing (Nov 2024):

- 10 farmer interviews conducted
- 5 SMS flow user tests
- 3 agricultural expert reviews

Feedback Scores:

- 90% "Very easy to use"
- 80% "Would trust blockchain escrow"
- 100% "SMS better than smartphone app"

Key Insights:

- Local language support critical → Added Swahili
- OTP confusion → Added help messages
- Want price history → Roadmap feature

Partnership Pipeline:

-  2 farmer cooperatives (LOI in progress)
-  1 NGO discussion (5,000 farmers)
-  Government agricultural office meeting scheduled

Next: 100-farmer pilot in January 2025

[Visual: Testimonial quotes + partnership logos]

SLIDE 9: BUSINESS MODEL

Path to \$7M ARR

Revenue Streams:

Primary: 2% Transaction Fee

- Applied to buyer payment
- Covers SMS, blockchain, operations

- Example: \$50 sale = \$1 fee

Secondary:

- Premium subscriptions: \$5/month
- API access: \$0.10/call
- Data insights: \$50K/year (anonymized)

Unit Economics:

- CAC (Customer Acquisition Cost): \$5/farmer
- LTV (Lifetime Value): \$28.80/farmer
- **LTV:CAC Ratio: 5.76:1** ✓ (Target: >3:1)
- **Payback Period: 4.2 months** ✓

Revenue Projections:

| Year | Farmers | Transactions | Revenue | Costs | Profit |
|------|---------|--------------|---------|--------|---------|
| 1 | 10K | 120K | \$126K | \$228K | -\$102K |
| 2 | 100K | 1.2M | \$1.32M | \$800K | +\$520K |
| 3 | 500K | 6M | \$7.2M | \$2.5M | +\$4.7M |

Break-even: 19,000 farmers (Month 18)

[Visual: Revenue growth chart]

SLIDE 10: MARKET SIZE & GO-TO-MARKET

\$140B Total Addressable Market

Geographic Expansion:

Phase 1: Kenya (Months 1-12)

- 2.5M smallholder farmers
- Strong mobile money penetration (85%)
- Government support for agritech
- **Target: 10,000 farmers**

Phase 2: East Africa (Year 2)

- Kenya, Uganda, Tanzania, Rwanda
- 20M farmers
- Shared language (Swahili)
- **Target: 100,000 farmers**

Phase 3: Sub-Saharan Africa (Year 3-5)

- 175M farmers
- \$140B annual market
- **Target: 5M farmers**

Go-To-Market Strategy:

Acquisition Channels:

1. Farmer Cooperatives (Months 1-6)

- Partner with existing cooperatives
- In-person demos at markets
- Cost: \$0 (relationship-based)

2. Word-of-Mouth (Months 6-12)

- Referral incentives
- Community champions
- Cost: \$2/farmer

3. Mass Marketing (Year 2+)

- Radio ads in local languages
- SMS campaigns
- NGO partnerships
- Cost: \$8/farmer

[Visual: Africa map with expansion phases colored]

SLIDE 11: COMPETITIVE LANDSCAPE

We're Different (And Better)

Competitive Analysis:

| | AgroTrack | Traditional Middlemen | Twiga/FarmDrive | Cooperatives |
|--------------|---------------------|-----------------------|-----------------|----------------|
| Device | Feature phone | In-person | Smartphone | In-person |
| Internet | Not required | N/A | Required | N/A |
| Farmer Price | Market price | -40% | Market price | Market price |
| Payment | Guaranteed (escrow) | Often unpaid | Guaranteed | Slow (30 days) |
| Speed | Instant | Same day | Hours | Weeks |
| Trust | Blockchain | Personal | Platform | Bureaucracy |

Our Unfair Advantages:

1. **SMS + Blockchain UX** - No one else has cracked this
2. **Multi-Agent AI on Hedera** - 6 months R&D, novel architecture
3. **Cost Structure** - Hedera enables profitability at \$1/transaction
4. **Network Effects** - More farmers = better prices = more farmers

Moat: Technology + Distribution + Network Effects

[Visual: Competitive positioning matrix]

SLIDE 12: IMPACT ON HEDERA

Bringing 5 Million Users On-Chain

Network Impact Projections:

Year 1: Kenya Pilot

- 10,000 new Hedera accounts
- 120,000 transactions/year
- ~2,000 monthly active accounts

Year 2: East Africa

- 100,000 new Hedera accounts

- 1.2M transactions/year
- ~20,000 monthly active accounts

Year 3: Continental

- 500,000 new Hedera accounts
- 6M transactions/year
- ~100,000 monthly active accounts

Year 5: 5M Farmers

- 5,000,000 new Hedera accounts
- 60M transactions/year
- 1M monthly active accounts
- **1.9 TPS sustained** (0.003% of Hedera capacity)

Transaction Fees to Hedera Network:

- Year 1: \$120
- Year 3: \$6,000
- Year 5: \$60,000

Strategic Value: Proof of real-world utility Emerging market adoption Regulatory clarity (not DeFi, just record-keeping) Positive social impact story

[Visual: Growth chart + Hedera network visualization]

SLIDE 13: ROADMAP (18 Months)

From Pilot to Platform

Q1 2025: Pilot Launch (Months 1-3)

- 500 farmers in Kenya
- 2-3 cooperatives
- SMS + M-Pesa integration
- Gather feedback, iterate

- **Goal: Prove product-market fit**

Q2 2025: Scale (Months 4-6)

- 10,000 farmers
- 10 cooperatives
- USSD interface (menu-based)
- Multi-language (Swahili + English)
- **Goal: Break-even on unit economics**

Q3 2025: Expansion (Months 7-9)

- 50,000 farmers
- Expand to Uganda + Tanzania
- Weather insurance integration
- API for third parties
- **Goal: Series A fundraise (\$2M)**

Q4 2025: Platform (Months 10-12)

- 100,000 farmers
- Agent marketplace (others deploy agents)
- Credit scoring via transaction history
- Input supply chain
- **Goal: Profitability**

2026+: Network Effects

- 1M+ farmers
- Self-service onboarding
- Mainnet graduation
- Additional crops/use cases

[Visual: Timeline with milestones]

Team

Edward Johnson - Founder & Technical Lead

- Background: [Your background]
- Expertise: Hedera + AI + Agricultural systems
- Previous: [Relevant experience]

[Hiring Plan]:

- Q1: Operations Manager
- Q2: Marketing Lead
- Q3: 2x Customer Success Agents

Advisors:

- Agricultural extension officers (government)
 - Blockchain developers (Hedera ecosystem)
 - NGO representatives (distribution partners)
-

The Ask

Hackathon:

- 🏆 Looking to win AI & Agents track
- 🤝 Seeking Hedera ecosystem partnerships
- 🔈 Want exposure to VCs/angels

Beyond Hackathon:

- 💰 Seeking: \$250K seed funding

- 18 months runway
- Hire 2 people
- Launch 100-farmer pilot

- 🤝 Partnerships:

- Farmer cooperatives

- NGOs (FAO, WFP)
- Mobile money providers

-  **Support:**

- Hedera grant program
- Mentorship from Hedera team
- Marketing support

Use of Funds:

- 60% Team (3 people × 18 months)
- 20% Operations (server, SMS, marketing)
- 15% Pilot program (100 farmers)
- 5% Legal/Admin

[Visual: Pie chart of fund allocation]

SLIDE 15: CLOSING - THE VISION

One SMS. 5 Million Farmers. Zero Middlemen.

The Problem: 800 million farmers trapped in poverty by middlemen.

The Solution: Multi-agent AI + Hedera blockchain + SMS = instant, trustless marketplace.

The Impact:

-  **Farmers:** +40% income, guaranteed payment
-  **Buyers:** Direct access, quality produce
-  **Hedera:** 5M new accounts, proof of real-world utility
-  **World:** Reduced food waste, sustainable agriculture

The Opportunity: \$140B market. 175M farmers. \$0.001 transaction costs.

The Team: Built it. Tested it. Ready to scale it.

Join us in bringing the next 5 million users to Hedera.

Contact:

-  Email: [your email]
-  Website: [your site]
-  GitHub: [your repo]
-  Demo: [video link]

Live Demo:

- Testnet: hashscan.io/testnet/topic/0.0.7165737
- Dashboard: [your deployed URL]

Try It Now: Text: [Your test number] Send: "Maize 200kg Kisumu"

"From feature phones to blockchain. From poverty to prosperity."

#HederaAscension #AIAgents #AgricultureRevolution

[Background: Inspiring image of farmer with harvest + smartphone showing transaction]