

Pitch Deck: Kisan Yantra (The Farmer's Machine)

1. Executive Summary: The Future of Farm Mechanization in India

Vision: To democratize access to high-quality, modern agricultural equipment for India's 140 million farmers, boosting yield and profitability by leveraging AI and ubiquitous mobile connectivity.

The Opportunity: The Indian Agricultural Machinery Market is projected to grow to **USD 27.29 Billion by 2030 (8.5% CAGR)**. This growth is driven by a critical need for mechanization among small and marginal farmers who cannot afford outright ownership.

The Solution: A unified platform featuring:

- 1. **Kisan Yantra Web Portal:** A digital marketplace connecting equipment owners (CICs, FPOs, large farmers) directly with renters.
- 2. **WhatsApp AI Agent (Sankalp):** An AI-powered assistant that facilitates end-to-end rental transactions (search, booking, confirmation) entirely through simple chat/voice commands in vernacular languages, catering to low-literacy, mobile-first users.

2. The Problem: The Mechanization Gap

Indian agriculture suffers from low mechanization rates and severe inefficiencies, particularly for smallholders (who make up over 80% of farmers).

Challenge	Impact on Farmer
High Capital Cost	A mid-sized tractor (>\$7,200 USD) is unaffordable. Farmers rely on informal, high-cost lenders.
Fragmented Land Holdings	Average farm size is often <2 hectares. Owning equipment is economically unviable and large machines are impractical.
Labour Shortages	Rural-to-urban migration drives up labour costs, creating an urgent need for mechanized operations during critical

	seasonal windows.
Information Asymmetry	Farmers lack centralized knowledge about equipment availability, nearest rental centers, or fair market rental rates.
Digital Divide	Traditional web-based solutions ignore the reality that many farmers prefer voice, local dialects, and simple chat interfaces like WhatsApp.

3. Market Opportunity & Validation

The transition from owned-to-rented equipment is accelerating, creating a massive addressable market.

Segment	Data Point	Significance
Total Addressable Market (TAM)	India Agri-Machinery Market: USD 18.15 Billion (2025) .	A massive market ripe for disruption.
Key Driver	Tractors capture 40.5% of the market share, underscoring their foundational rental demand.	Focus initial offerings on high-demand equipment (Tractors, Rotavators, Harvesters).
User Access Point	India has 853.8 Million active WhatsApp users (2024). WhatsApp is embedded "like breakfast tea" in rural communities.	MANDATE: The primary booking channel must be WhatsApp, not a complex app.
Government Focus	Government schemes (e.g., SMAM) actively promote the establishment of Custom Hiring Centres (CHCs), creating a supply pool of equipment owners ready for aggregation.	Align with government objectives and subsidy structures.

4. Our Solution: Kisan Yantra Platform

Kisan Yantra delivers a seamless, bilingual, and accessible rental experience across two integrated channels:

Component	Target User	Key Functionality
1. Web/Mobile App	Equipment Owners, Aggregators, FPOs, Admin Staff	Inventory management, pricing control, scheduling, Geo-fencing/GPS tracking, detailed reporting, digital payment integration.
2. WhatsApp AI Agent	Marginal and Small Farmers (The Renter)	Voice/Text Booking: Seamless, 2-minute booking process using simple chat commands and vernacular languages. Real-time Status: Get confirmation, track machine arrival, and receive reminders.

5. Core Value Proposition: Why Kisan Yantra Wins

Stakeholder	Value Delivered
The Farmer (Renter)	Accessibility & Convenience: Book any machine, anytime, using the platform they already use (WhatsApp). Fair Pricing: Transparent, market-driven rates eliminate middleman exploitation. Speed: Access to the nearest available machine within minutes during peak season.
The Owner (Supplier)	Increased Utilization: Maximize machine running hours (currently low) through wider market access. Digital Management: Automated invoicing,

	payments, and scheduling via the Web App. GPS Tracking: Enhanced security and accurate billing based on usage/time.
Kisan Yantra	Low Customer Acquisition Cost (CAC) by using WhatsApp, high transaction volume, and scalable platform for rapid regional expansion.

6. Product Deep Dive: Web Application (For Owners/Aggregators)

The Web App serves as the robust management layer for all inventory and logistics.

- **Owner Dashboard:** Real-time earnings, machine utilization rates, and performance analytics.
- **Inventory Mapping:** On-board, categorize, and GPS-tag all equipment (Tractor HP, Implement Type, etc.).
- **Dynamic Pricing Engine:** Allows owners to set flexible hourly/per-acre rates, potentially integrated with weather data for demand surges.
- **Payment & Invoicing:** Automated digital payment processing (UPI/NEFT) and generation of tax-compliant digital invoices for every transaction.
- **Logistics View:** Map view of all active rentals and machine locations for monitoring and dispatch efficiency.

7. Product Deep Dive: WhatsApp AI Agent (Sankalp)

Sankalp is the critical innovation that drives adoption among the target demographic.

Technology: LLM-backed conversational agent integrated with the WhatsApp Business API and our core booking database.

User Journey (Voice/Text Prompt):

1. **Farmer:** (Sends voice message in Hindi/Marathi) *"Humein kal subah 10 baje ke liye ek Rotavator chahiye, gaon: Rampur."* (We need a rotavator for 10 AM tomorrow, village: Rampur.)
2. **Sankalp AI:** (Parses, checks geo-availability, and responds instantly) *"Namaskar. Rampur mein 3 Rotavator uplabdh hain. Nearest machine 4 km door hai, kiraya 400 rupay ghanta. Kya aap yeh book karna chahte hain? Reply 'YES' or 'NO'."* (Hello. 3 Rotavators are available in Rampur. The nearest machine is 4 km away, rental is 400 rupees per hour. Do you want to book this? Reply 'YES' or 'NO'.)
3. **Farmer:** (Replies) *"YES"*

4. **Sankalp AI:** Confirms booking, shares owner contact, and sends a real-time GPS link to track the machine's arrival.

Key Features:

- **Multilingual Support:** Handles Hindi, Marathi, Punjabi, Telugu, etc.
- **Voice Command Processing:** Essential for low-literacy users.
- **Contextual Dialogue:** AI remembers previous requests and locations.
- **Automated Reminders:** Sends alerts to both renter and owner 1 hour before the scheduled time.

8. Business Model & Revenue Streams

Our model is transaction-based, ensuring revenue scales directly with utilization and adoption.

Revenue Stream	Detail	Target Rate
Transaction Fee (Commission)	A percentage commission charged to the equipment owner on every successful rental transaction facilitated through the platform.	10%–15% of the total rental value.
Premium Services (Owners)	Optional subscription for enhanced telematics (fuel efficiency monitoring, predictive maintenance alerts).	Tiered monthly subscription.
Financing Leads	Partnering with NBFCs/Banks to offer credit to farmers and equipment owners, generating referral fees.	1%–2% per loan disbursement value.
Data Monetization	Aggregate, anonymized data on crop cycles, machine demand, and usage for manufacturers and insurance providers.	Annual license fee (future revenue).

9. Competitive Landscape & Differentiation

The market currently consists of unorganized local middlemen and government-run Custom Hiring Centres (CHCs). Existing tech competitors often fail due to low mobile adoption or lack of regional language support.

Competitor Type	Competitor Examples	Kisan Yantra Differentiation
Unorganized Local Agents	Village broker/middleman	Price Transparency and elimination of exploitation. AI-driven Logistics for faster service.
Existing Aggregators	Tractor Junction, EM3 Agriservices (Web/App focused)	WhatsApp-First Approach (High Accessibility). Voice Command Integration. Hyper-Local Focus on rural connectivity.
Government CHCs	State-run Centers	Aggregation: We connect to ALL sources (CHC, FPO, Private Owner) in one place. Superior UX: Instant booking vs. manual paper process.

10. Financial Projections & Call to Action

Assumptions (Year 1 Focus: 3 States / 50 Districts):

- Target User Base: 10,000 active renting farmers.
- Target Owner Base: 1,500 registered machines.
- Average Rental Value (ARV): 3,000 INR per transaction.
- Average Transactions per Machine: 150 per year.

Metric	Year 1 Projection	Year 3 Projection
Total Transactions	150,000	750,000

Total Rental Value (GMV)	450 Million INR	2.25 Billion INR
Platform Revenue (10% Fee)	45 Million INR (\$540K USD)	225 Million INR (\$2.7M USD)
EBITDA Margin	-15% (Investment Phase)	+20%

The Ask:

We are seeking 1.5 Million USD in seed funding over 18 months to achieve:

1. **Tech Development:** Finalizing the LLM integration and robust web platform (50%).
2. **Onboarding & Sales:** Regional teams for owner/machine acquisition (30%).
3. **Marketing & Awareness:** Localized print and rural digital campaigns (20%).

Join us in mechanizing India's backbone. Kisan Yantra: Powering Every Acre.