

AgriRent

Agricultural Equipment Sharing & Rental Platform

Connecting Farmers with Equipment Owners

Team Keyboard-Smashers



Made with **GAMMA**

Revolutionizing Agricultural Equipment Access

1

High Equipment Costs

Small farmers face significant capital expenditure, making essential machinery inaccessible.

2

Idle Machinery

Existing equipment often sits unused, representing a missed opportunity for owners.

3

Inefficient Processes

Manual rental systems lead to delays, errors, and a lack of transparency.

4

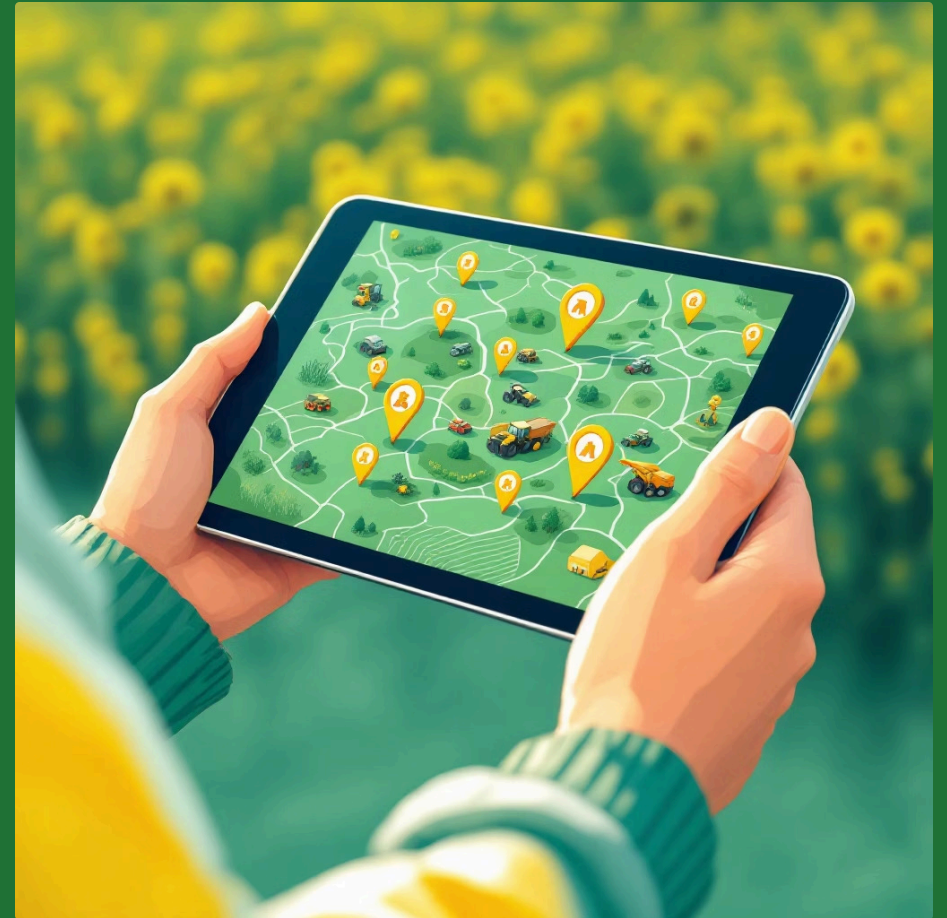
Lack of Trust

Absence of a reliable platform hinders secure and dependable transactions.



AgriRent: Bridging the Gap in Agriculture

- **Digital Platform:** Seamlessly connects farmers, equipment owners, and administrators.
- **Easy Discovery & Booking:** Intuitive interface for locating and reserving equipment.
- **Map-Based Tracking:** Pinpoint nearby equipment for optimal logistics.
- **Trust & Transparency:** Robust review, rating, and dispute resolution system.



Streamlined Workflow for All Users

1

Farmer Workflow

- Login & Discover
- Book & Chat
- Review Experience

2

Owner Workflow

- List Equipment
- Manage Bookings
- View Analytics

3

Admin Workflow

- Approve Listings
- Monitor Activity
- Resolve Disputes



UNDER THE HOOD

Robust Technology Stack

Frontend

React.js

Database

MongoDB

AI/ML

Flask Services



Backend

Node.js, Express.js



Real-time

WebSockets



RAG

LLM with Pinecone Vector Embeddings

Empowering the Agricultural Community



Role-Based Dashboards

Tailored interfaces for farmers, owners, and administrators.



Equipment Management

Easy listing, searching, and booking of diverse machinery.



Location-Based Discovery

Interactive map view for finding nearby available equipment.



Real-time Communication

Integrated chat for seamless interactions between users.



Ratings & Dispute Resolution

Building a trusted community through feedback and mediation.



Multilingual Support

Accommodating a diverse user base for broader accessibility.

AI & Machine Learning Enhancements



- **RAG-Based Agriculture Chatbot:** Instant, context-aware support for farming queries.
- **Intelligent Equipment Recommendations:** Personalized suggestions based on land, crop, and farming stage.
- **ML Insights:**
 - Dynamic pricing suggestions for optimal rates.
 - Demand forecasting to anticipate equipment needs.

Analytics & Reporting for Informed Decisions



- **Real Data-Driven Analytics:** Actionable insights from platform activities.
- **Key Performance Indicators:** Monitoring reviews, ratings, and equipment pricing trends.
- **Downloadable PDF Reports:** Convenient for record-keeping and strategic planning.
- **Admin & Owner Dashboards:** Customized views for comprehensive oversight and management.

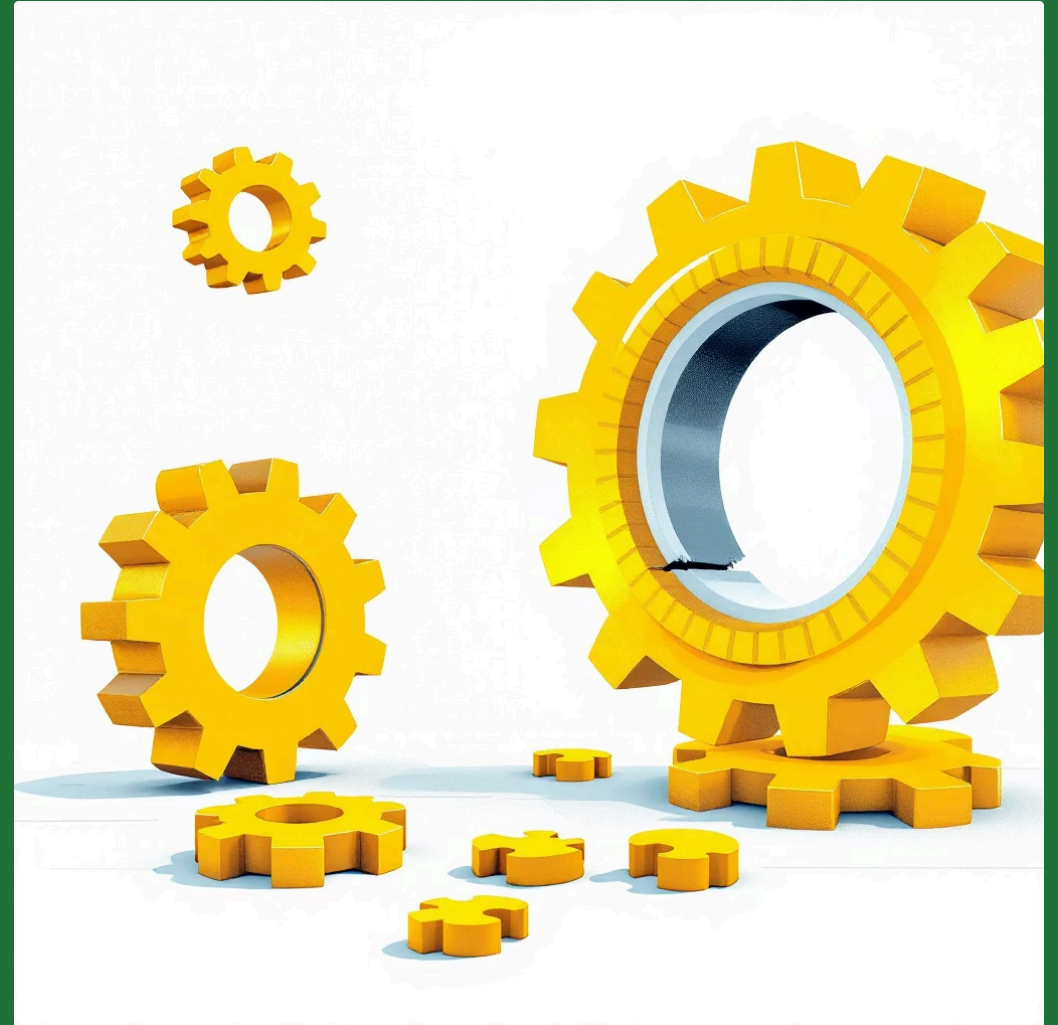
Scope and Limitations

Scope

- Enables location-based agricultural equipment rental for farmers and owners
- Provides real-time communication, reviews, disputes, and analytics
- Integrates fully implemented AI/ML features and multilingual support

Limitations

- Payment processing is not included in the current version
- Equipment image/media handling is not part of the scope
- Advanced scheduling scenarios (e.g., overlapping or long-term bookings) are handled at a basic level



CONCLUSION

AgriRent: A Brighter Future for Farming



Monetize Idle Assets

Equipment owners can generate income from unused machinery.



Enhanced Equipment Access

Democratizing access to vital farming tools for all farmers.



Transparent & Scalable

A reliable platform built for growth and trust.



Ready for Demo & Future Growth

Poised for immediate demonstration and continuous enhancement.

Thank You!