



DATA SHARING IS
ENHANCING AGRICULTURE
LIKE NEVER BEFORE!

Agricultural Intelligence Platform

"Your Land is Your Data"

A spinoff from Entrust Doctoral Network in Europe

Pitch for Tasmu Accelerator Qatar

The Problem

Siloed Agricultural Data

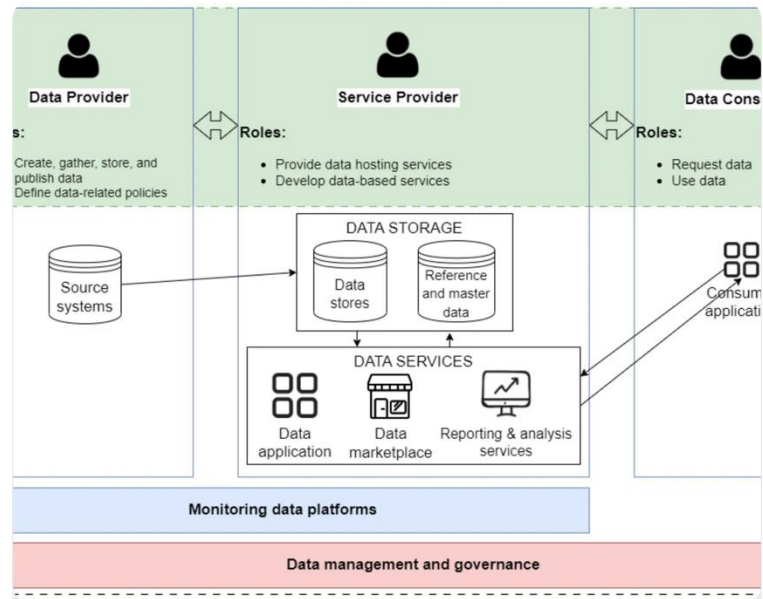
Valuable farm data is trapped in isolated systems, preventing farmers from leveraging their own information for better decision-making.

Lack of Data Ownership

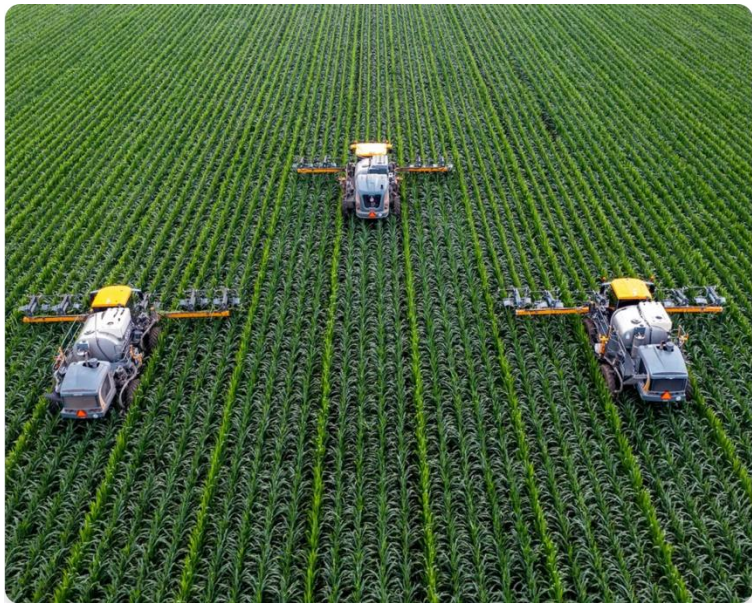
Farmers generate valuable data but often lose control and ownership rights when using traditional agricultural platforms.

Missed Optimization Opportunities

Without secure data sharing capabilities, farmers miss critical opportunities for yield enhancement, resource optimization, and sustainability improvements.



Our Solution



Agricultural Intelligence Platform

Cropcortex provides a comprehensive platform that integrates farm data, weather information, and market insights to drive intelligent decision-making.

Model Context Protocol (MCP)

Our implementation of MCP ensures farmers maintain complete ownership and control of their data while enabling secure, permission-based sharing.

Seamless Integration

Production-ready system with AI integration (Qwen3-32B), real-time data access, and scalable deployment capabilities.

"Your land is your data" - Putting farmers back in control

Model Context Protocol (MCP)

⚙️ How MCP Works

MCP creates a standardized communication layer between AI models and data sources, ensuring secure and controlled access to agricultural data.

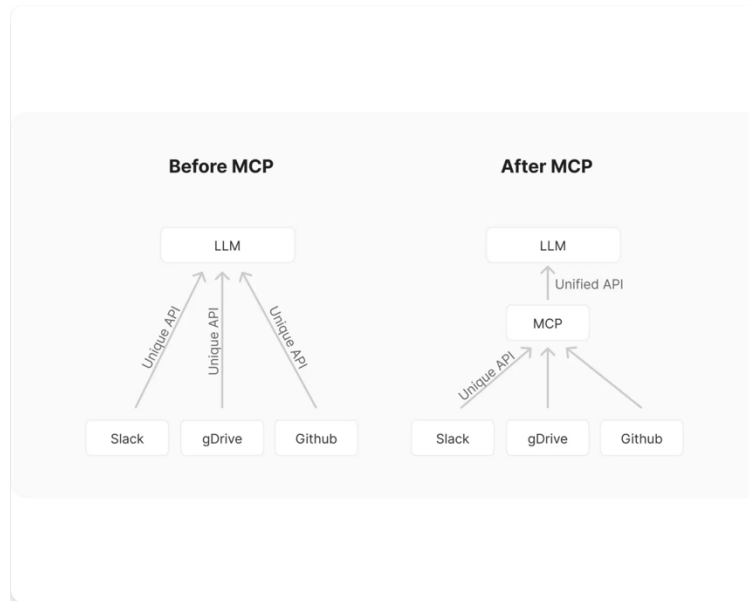
🔒 Data Ownership & Control

Farmers maintain complete ownership of their data while selectively sharing insights with trusted partners through permission-based protocols.

🔌 Seamless Integration

Our MCP implementation connects with Claude Desktop, agricultural databases, and weather/market data sources through standardized interfaces.

"MCP transforms siloed agricultural data into a secure, interconnected ecosystem while preserving farmer sovereignty."



Product Features



Farm Operations Analysis

Comprehensive analytics dashboard providing insights on farm performance, resource utilization, and operational efficiency.



Crop Intelligence Center

AI-powered crop monitoring and prediction system using Qwen3-32B for agricultural intelligence and yield enhancement.



Weather Intelligence

Real-time weather data integration with predictive analytics for optimal planting, irrigation, and harvesting decisions.



Farm Optimization

Resource allocation tools and sustainability metrics to maximize yield while minimizing environmental impact.



MCP System Status

Real-time monitoring of Model Context Protocol implementation, ensuring data security and ownership controls.



Claude Desktop Integration

Seamless integration with Claude Desktop through 7 MCP tools for enhanced AI-powered decision support.

All features built on the foundation of secure data ownership and sharing

Market Opportunity

Qatar's Agricultural Vision

Aligns perfectly with Qatar's Digital Agenda 2030 and food security initiatives, addressing the nation's goal of 70% self-sufficiency in agriculture.

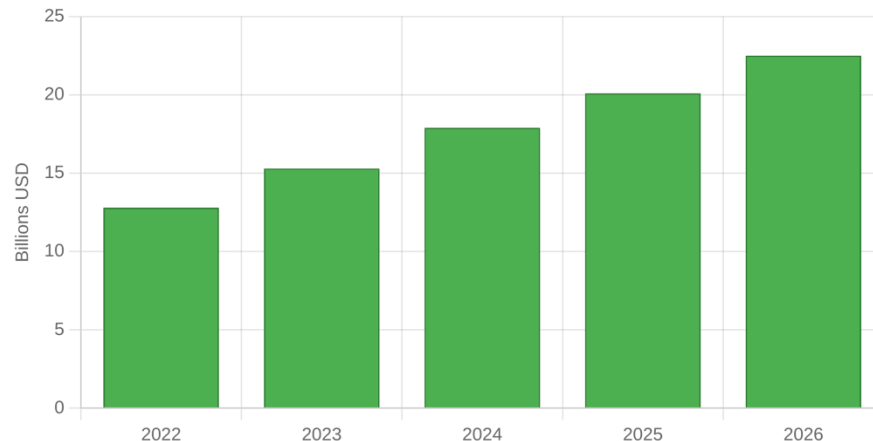
Growing AgTech Market

The global agricultural data market is projected to reach \$22.5 billion by 2026, with the Middle East region showing the fastest growth rate at 19.3% CAGR.

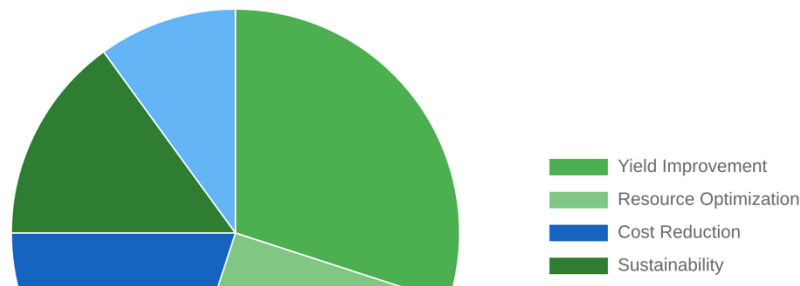
Strategic Partnerships

Opportunity to integrate with Qatar's smart city initiatives and collaborate with regional agricultural stakeholders to create a comprehensive data ecosystem.

Global AgTech Market Growth (\$ Billions)



Agricultural Data Sharing Benefits



Business Model

Revenue Streams

Tiered subscription model based on farm size and feature access, with premium analytics packages for enterprise clients.

Partnership Model

Strategic partnerships with agricultural equipment manufacturers, research institutions, and government agencies to expand platform capabilities.

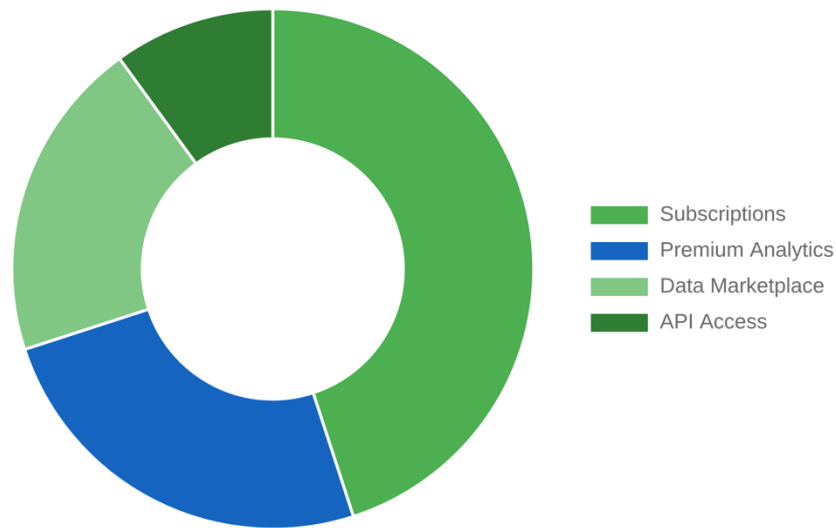
Data Marketplace

Optional opt-in data marketplace where farmers can monetize anonymized insights while maintaining ownership and control.

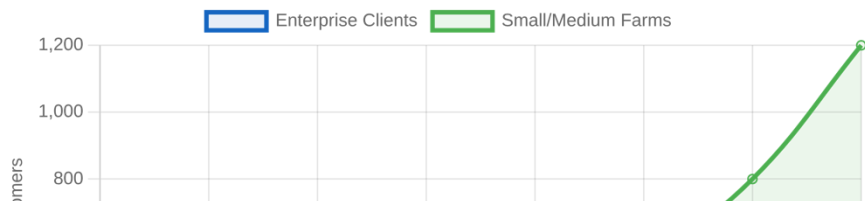
Growth Strategy

Initial focus on European and Middle Eastern markets, with phased expansion to global agricultural hubs within 3 years.

Projected Revenue Breakdown



Customer Acquisition Timeline



Traction & Roadmap

Current Achievements

- ✓ Production-ready MCP server with environment configuration and AI integration
- ✓ Integration with Claude Desktop and real-time agricultural databases
- ✓ Successful deployment with Modal Labs support for scalability
- ✓ Established partnership with Entrust Doctoral Network in Europe

Key Metrics

- 📈 Successfully tested with 25+ hectare farms in Germany
- 📈 Demonstrated 15-20% yield improvement in pilot tests

Our Team



Nur Arifin Akbar

Co-Founder

Universita Degli Studi di Palermo



Rahool Dembani

Co-Founder

SingularLogic Greece



Core Development Team

AI & Data Science

Experts in agricultural intelligence, data protocols, and scalable platform development.

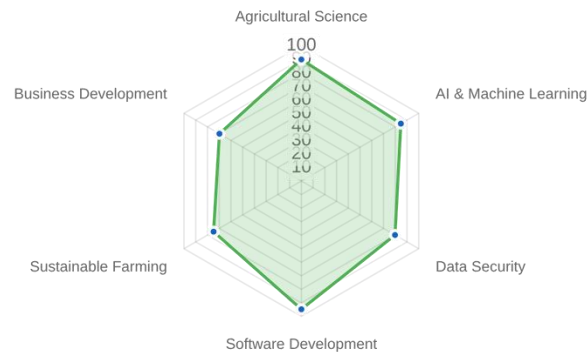


Research & Partnerships


Agricultural & Environmental Science

Specialists in sustainable farming practices and strategic collaborations.


Team Expertise



Strategic Network

 Entrust Doctoral Network (Europe)

 Academic & Research Collaborators

 Technology Partners

Our Ask & Alignment with Tasmu



Funding

Seeking QAR 200,000 to accelerate platform development and launch Qatar pilot program



Strategic Partnerships

Access to Qatar's agricultural stakeholders and technology ecosystem



Market Entry

Support for MENA region expansion with Qatar as our regional hub



Mentorship

Guidance on regulatory compliance and localization strategies

Alignment with Tasmu Goals

- ✓ Supports Qatar's Digital Agenda 2030
- ✓ Enhances food security initiatives
- ✓ Promotes sustainable agricultural practices
- ✓ Creates innovative technology ecosystem

"Join us in revolutionizing agricultural data ownership and intelligence"

Try our MVP



<https://huggingface.co/spaces/Agents-MCP-Hackathon/CropCortex>