



GrowWise

A I - D R I V E N F E R T I L I Z A T I O N F O R B E T T E R Y I E L D S

presented by:

The Lost Investments



Problem Statement



The agricultural market lacks accessible and personalized fertilizers and soil testing. Farmers often use generic fertilizers, leading to inefficient nutrient use, lower yields, and environmental harm. Traditional soil testing is expensive, time-consuming, and inaccessible to small farms. As a result, many farmers rely on guesswork, causing nutrient imbalances and long-term soil degradation, which limits productivity and profitability while promoting unsustainable practices.

Solution



At GrowWise, we are committed to practicing sustainable agriculture by minimizing environmental impact, conserving natural resources, and promoting biodiversity. By analyzing soil health and nutrient profiles with AI-powered sensors, we can provide customized fertilizer recommendations that cater to the specific needs of each farm. The system collects real-time data on soil moisture, temperature, and nutrient levels, which is processed by machine learning algorithms to identify nutrient deficiencies. This enables us to offer tailored fertilizer blends, maximizing crop yield while minimizing waste and costs. As a result, farmers benefit from optimized productivity and sustainable farming practices that enhance both soil health and profitability.

Key Partners

- Sensor Manufacturers
- Hardware Suppliers
- Cloud Service Providers
- Agricultural Co-operatives and Government Bodies
- Distributors and Retail Partners
- Marketing and Branding Partners
- Chemical Companies

Key Activities

- Improve customer experience
- Reduce Environmental Risks
- Product Development
- Machine Learning Model Training
- Manufacturing and Assembly
- Data Collection and Processing

Key Resources

Sensors, Microcontroller, Camera, Battery, Connectivity Modules, ML, Models, Mobile App, IoT Platform

Unique Value Proposition

- For IoT/ML Device-
 - Real-time Soil Health Monitoring
 - Automated Crop Disease Detection
 - Portable and Easy to Use
 - Data-driven Decision Making
- Cloud and App Integration
- For App:
 - Real-time Data Access
 - Crop Disease Detection
 - User-friendly Interface
 - Historical Data Tracking
 - Custom Notifications and Alerts

Customer Relationships

- Personalised experience
- Customer service and consultation
- Proactive engagement
- Conveniently access

Channels

- Word of mouth
- Partnerships
- Marketing
- Discount, Promo
- Websites

Customer Segments

- Bulk producers
- Long term customers
- High demand
- Small scale producers
- Frequent supply

Cost Structure

- Cost of Revenue: Labor cost, Hardware and software costs, Manufacturing and assembly, Website hosting, App production fees
- Legal Costs: Patent cost, Testing and Certification, Privacy policies
- Sales & Marketing: Driver referrals, Discount and promos, Marketing agencies

Revenue Streams

- Sensor device (30-35% marg)
- App - Premium, Service Charges, Promotion, Commission based revenue model

Market Analysis

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Market Overview:

Smart Agriculture: Projected to reach USD 22 billion by 2025, driven by IoT-based solutions like soil moisture, nutrient analysis, and pH monitoring.

Precision Farming: Growing niche optimizing yields and reducing waste.

Fertilizer Market: Valued at USD 160 billion (2021); data-driven product suggestions can boost adoption.

Growth Drivers:

Global Food Demand: Rising population demands efficient agriculture and soil health monitoring.

Sustainability: Governments push for reduced chemical use; targeted recommendations can support this.

Data-Driven Farming: ML improves decisions, reducing guesswork in fertilizer/pesticide usage.

Revenue Model:

Device Rentals: Subscription-based IoT device rental.

App Subscription: Monthly access to nutrient analysis and product recommendations.

Partnerships: Collaborations with fertilizer/pesticide companies for premium listings and added revenue.

Competitors Analysis

CropX is an agricultural analytics company that develops cloud-based software solutions integrated with wireless sensors, which helps farmers boost crop yield, targeting irrigation management tools.

Valuation – \$150 million

BharatAgri – AI-driven agronomy services through a mobile app. This app guides farmers on when and how to perform crucial farming tasks like irrigation, fertilization, and pest control BharatAgri is \$17.2M



Intello–An agritech startup that uses image analysis technology to identify diseases in crops. The latest valuation of Intello labs is \$82.7M
Cropin is an agri-tech company, focusing on leveraging technology to enhance agricultural productivity and sustainability. Their primary product is the Cropin Cloud, which is positioned as the world’s first industry cloud for agriculture. The latest valuation of Cropin is \$95.7M

STRENGTHS

- Precision Farming: AI sensors deliver accurate soil analysis for customized fertilizer blends.
- Cost Efficiency: Reduced fertilizer waste cuts costs and improves productivity.
- Sustainability: Minimizes over-fertilization, supporting eco-friendly farming and soil health.
- Accessibility: Brings advanced technology to small-scale farmers.

WEAKNESSES

- High Initial Investment: AI tools may be costly for some farmers.
- Technical Expertise: Farmers may need training to use the technology.
- Limited Infrastructure: Adoption may be difficult in areas with weak tech infrastructure

OPPORTUNITIES

- Demand for Sustainability: Rising focus on sustainable agriculture boosts demand.
- Global Scalability: Can expand to various regions and farm sizes.
- Partnerships: Collaborations with governments or NGOs could ease adoption.

THREATS

- Competition: Rival agri-tech solutions may reduce market share.
- Economic Instability: Financial challenges could limit investment.
- Regulatory Barriers: Different regulations may hinder implementation in some markets.

Political

Government initiatives supporting smart farming and agricultural subsidies may increase product adoption. However, changes in policy or import tariffs could raise costs.

Economic

Personalized recommendations from our device significantly improve crop yields, allowing farmers to sell more produce and increase their revenue and profits. This growth encourages reinvestment in our product, driving our revenue growth as well, creating a sustainable economic cycle.

Social

Growing awareness of sustainable farming and environmental consciousness among farmers can boost demand for your device, which promotes eco-friendly agricultural practices.

Technological

Advances in IoT, AI, and machine learning create opportunities to enhance your product's functionality. Staying ahead of tech trends will improve competitiveness and performance.

Environmental

Your product helps address issues like water conservation and soil health, aligning with global environmental goals, making it appealing to farmers looking for sustainable solutions.

Legal

Compliance with BIS and FCC certifications is essential for legal sales in India and the USA. Ensuring compliance will smooth market entry and avoid legal complications.

Social Impact



Improved Farmer Livelihoods: Boosting crop yields and income, your device enhances economic stability and quality of life for smallholder farmers.

Sustainable Practices: It promotes efficient fertilizer use, reducing environmental harm and supporting eco-friendly farming.

Food Security: Higher agricultural output helps meet growing population demands and improves nutrition in underserved areas.

Educational Empowerment: Farmers gain tech literacy, enabling informed decisions and fostering rural innovation.

Reduced Rural-Urban Migration: More profitable farming decreases migration, preserving rural economies and cultures.

Community Health: Optimized fertilizer use reduces pollution, improving health, clean water access, and food safety.

APP PREVIEW

