



Indian Institute of Technology Guwahati



# KRITI 25'

## EcoGrow | Let's grow together

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Revolutionizing Organic Farming with  
Marketplace and Weather Insights

# Executive Summary

2025



## Project Overview

### Situation

Organic farmers face limited market access, high certification costs, and logistical challenges, leading to low profitability. Consumers struggle with high prices, limited availability, and trust issues regarding organic authenticity. Additionally, unpredictable weather conditions cause crop losses and financial instability for farmers.

### Objective

To create a comprehensive solution that bridges the gap between organic farmers and consumers, offering a direct marketplace and AI-driven weather insights. The platform will ensure fair pricing, real-time advisory, and traceable organic certifications, enhancing trust, efficiency, and sustainability.

## Case Study Breakdown

Understanding market challenges – Price inflation, middlemen exploitation, certification barriers.

Analysing farmer struggles – Lack of digital access, unpredictable weather, limited resources.

Actionable recommendations – Marketplace integration, weather-driven analytics, direct farm-to-home delivery.

Implementation plan & Financials – Technology adoption, logistics support, awareness campaigns & Break-even Analysis.



### Realising the Problem & Need for a Solution

- High organic food prices due to middlemen.
- Farmers struggle with market access, certification costs, and unpredictable weather.
- Consumers demand transparency in the organic food supply chain.

### Cracking Bottlenecks in the Existing System

- Current challenges:** Middlemen-driven supply chain, lack of direct access to consumers.
- Existing infrastructure:** Limited e-commerce adoption among farmers.
- Contributory factors:** Price markups, weather uncertainty, and consumer skepticism.

### Proposing Appropriate Solutions

- Technology-driven direct marketplace for organic produce.
- Weather-based advisory tools to aid farming decisions.
- Affordable organic certification programs and financial support.
- Improved logistics and delivery infrastructure for farm-to-table supply chains.

### Ensuring Effective & Measurable Progress

- Short & long-term strategies: Farmer onboarding, digital education, logistics partnerships.
- Policy changes & financial incentives: Subsidies for certification, organic input access.
- Risk mitigation strategies: Real-time weather alerts, sustainable farming practices.
- KPIs for success: Increased farmer revenue, higher consumer adoption, reduced organic food wastage.

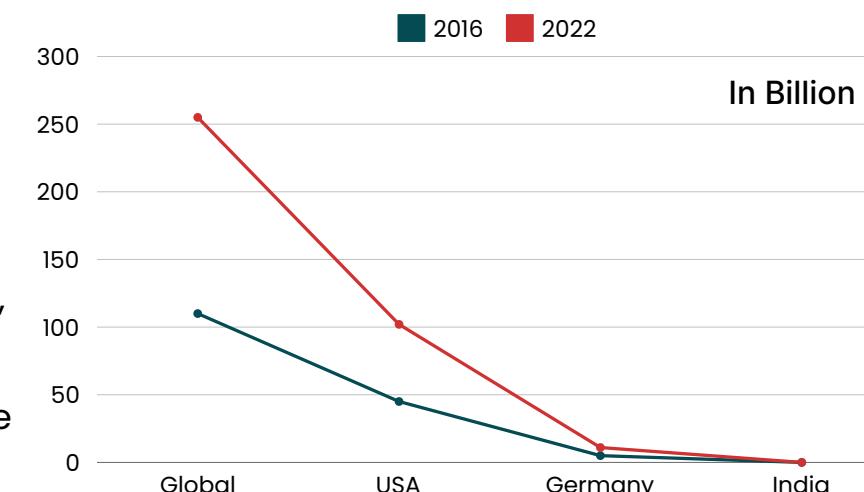


## Analysis Breakdown

# Understanding the Problem

## Underdeveloped Domestic Market

- Low Domestic Consumption:** Only 7.5% of organic produce is sold locally, while 85% is exported.
- Limited Accessibility:** Organic food is mostly available in premium supermarkets at high prices, restricting consumer adoption.
- Low Awareness:** Only 25% of consumers are aware of organic products; just 9% actively purchase them.



## Lack of Digital Infrastructure & E-Commerce Access

- No Nationwide Organic Marketplace:** Farmers rely on offline wholesale markets with no direct-to-consumer access.
- Low Digital Literacy:** Farmers struggle with e-commerce platforms and digital payments, restricting online adoption.
- No Aggregation Model:** Absence of an efficient farm-to-table e-commerce ecosystem prevents urban consumers from accessing organic food directly.

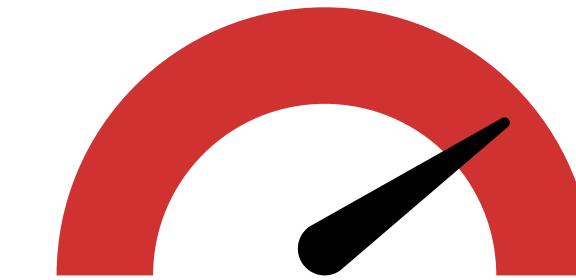


## Middlemen-Driven Price Inflation & Farmer Exploitation

Excessive Price Mark-Ups	Farmer price for organic rice is ₹52/kg, but consumers pay ₹110/kg due to intermediary mark-ups.
Supply Chain Bottlenecks	60% of organic food is sold via wholesalers, cutting farmers' earnings.
Limited Direct Market Access	Farmers rely on <b>intermediaries</b> , reducing profitability and discouraging large-scale organic adoption.

Intermediary mark-ups inflate consumer prices and cut farmer profits. Bottlenecks and limited market access worsen earnings and hinder organic growth.

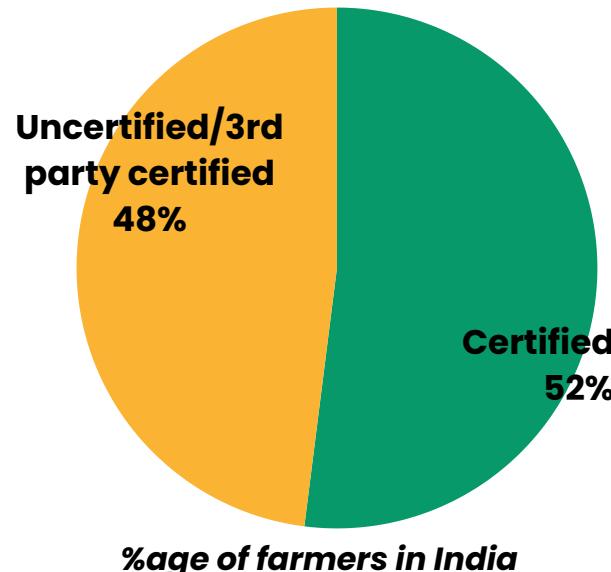
## Lack of Consumer Trust



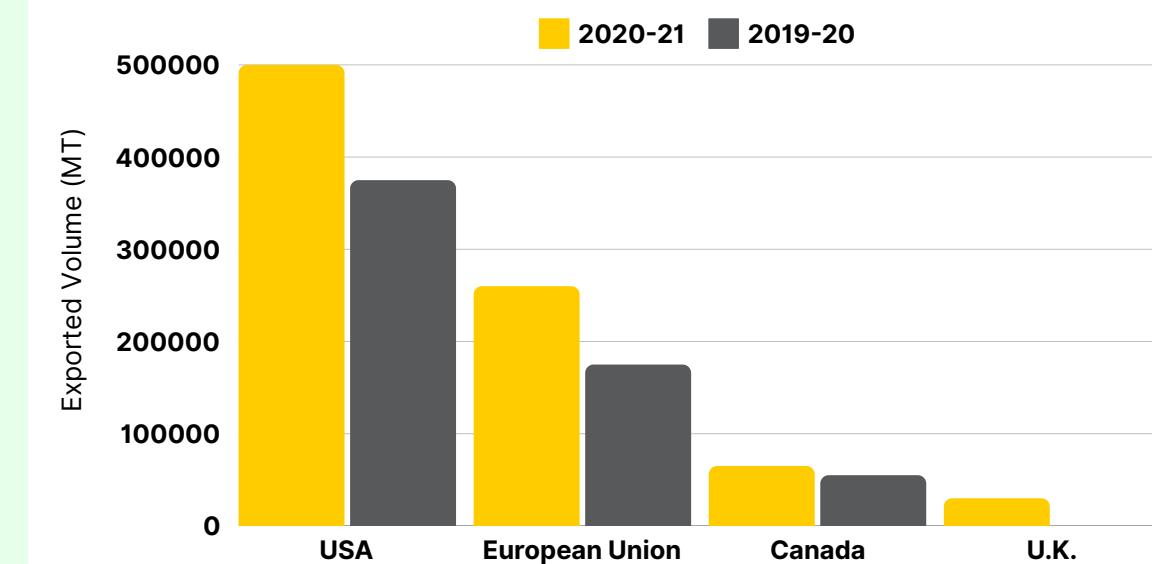
A lot of consumers face trust issues with organic products due to unclear and inconsistent eco-labeling, leading to confusion and reduced confidence in authenticity.

## Certification Issues

The large number of uncertified farmers due to lack of NPOP & PGS certification reduces consumer trust in organic produce.



## Export-Oriented Market Neglecting Domestic Consumers



India relies heavily on exports, mainly to the USA and EU, but lacks a domestic market for surplus produce, leading to wastage. Farmers face price instability due to export challenges.

**Export-Dependent Pricing:** Indian farmers struggle with export documentation, logistics, and price fluctuations.

**No Domestic Absorption Mechanism:** Farmers have no platform to redirect unsold exports to local markets, leading to wastage.

# Detailed Analysis of the Indian Organic Market

## Serviceable Available Market: ₹120.51 billion

Portion of the market we can reasonably target based on its product positioning and reach – Tier 1 & Tier 2 cities in India

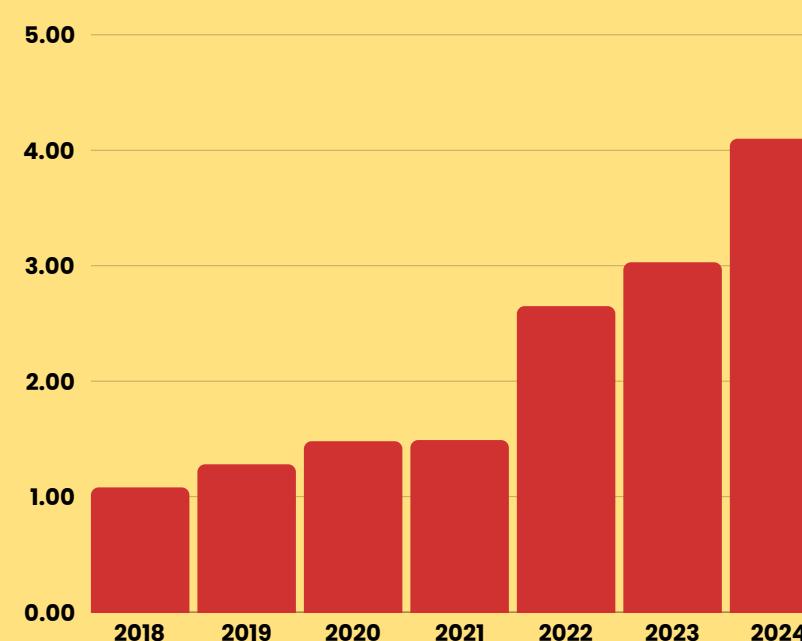
### Target Audience in Tier 1: 100 million

- Average yearly spending on organic farming products = ₹613
- Market size**:  $100 \text{ million} \times ₹613 = ₹61.3 \text{ billion}$

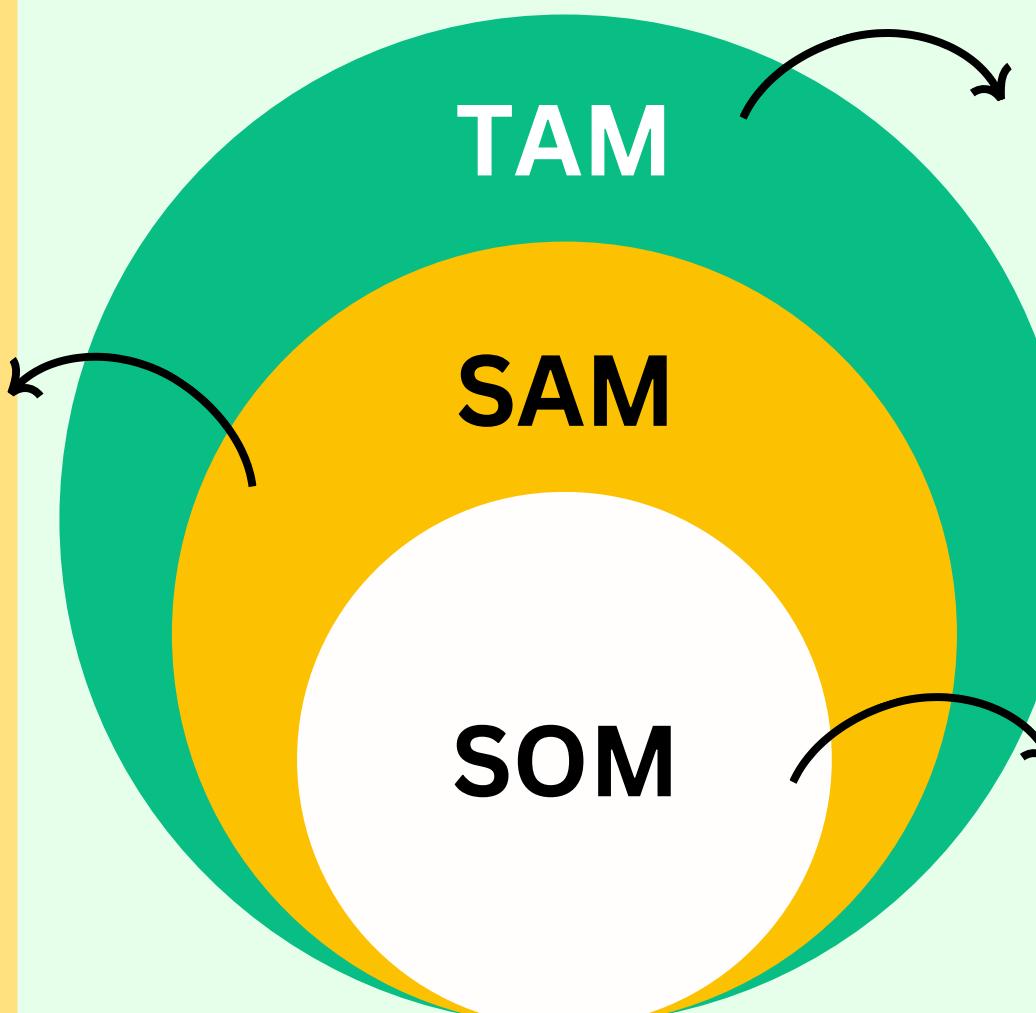
### Target Audience in Tier 2: 129 million

- Average yearly spending on organic farming products = ₹459
- Market Size:  $129 \text{ million} \times ₹459 = ₹59.21 \text{ billion}$

### Area (in %) under Organic Farming in India 2018–2024



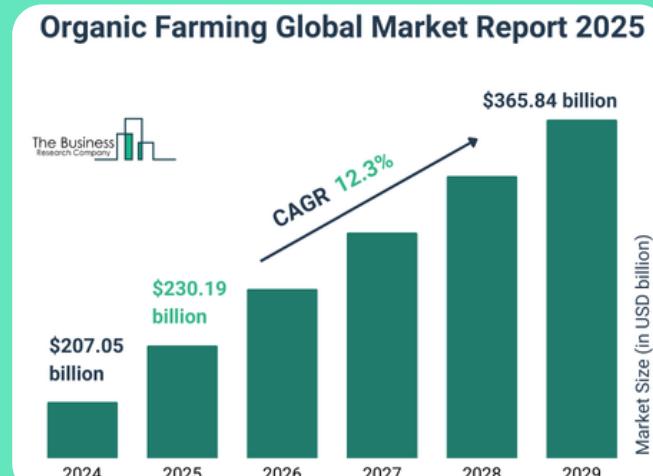
Organic farming in India has steadily grown since 2018, with a sharp rise after 2021, indicating increasing adoption.



## Total Addressable Market: \$204 billion

The global organic farming products market.

Valued at **\$204 billion** in 2023, projected to grow to **\$658 billion** by 2032 at a **CAGR of 12.3%**.



## Serviceable Obtainable Market: ₹48.413 billion

Market share we can realistically capture in India based on current and future capabilities.

### Segment-Specific Penetration Rates:

- Tier 1: 30%** (high initial penetration rate due to lack of similar online marketplace)
- Tier 2: 20%** (relatively lower penetration rate due to lower preference for organic products)

### SOM Calculations

- Tier 1 Cities:** ₹61.3 billion  $\times 30\% = ₹18.39 \text{ billion}$
- Tier 2 Cities:** ₹59.21 billion  $\times 20\% = ₹11.84 \text{ billion}$

**Total SOM:** ₹18.39 billion (Tier 1) + ₹11.84 billion (Tier 2) = ₹30.23 billion



% of Indian consumers willing to pay for organic products upto **25% more than conventional products**

# Weather & Meteorological Advisory

## Challenges Faced by Farmers Due to the Lack of Weather Predictions



**Unpredictable weather events** like droughts, floods, heatwaves, and frost can destroy crops, reducing yields and causing severe financial losses.



Heavy rainfall can wash away fertile topsoil, **depleting nutrients** essential for plant growth, leading to **lower productivity**.



Forecasts help farmers **detect and prevent pest and disease** outbreaks, safeguarding crops by addressing **temperature** and **humidity changes** that promote such issues.



Accurate forecasts help farmers **optimize irrigation**, conserve water, and improve crop health through smart techniques like drip irrigation.

### Crop Damage

### Soil Erosion & Nutrient Loss

### Early Pest & Disease Control

### Efficient Water Management

## Benefits Farmers Would Gain if they get early Weather Insights

### Systematic Crop Planning

### Climate Risks Threaten Farmers' Finances

### Soil Protection

### Harvesting & Storage Efficiency

Accurate **weather predictions** help farmers optimize sowing, harvesting, and crop care, reducing risks and improving yields.



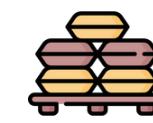
Unpredictable weather raises investment risks, increasing **farmers' loan dependence**. Informed decisions help manage finances and reduce climate impacts.



Farmers can **implement protective measures** like mulching and cover cropping to prevent erosion and retain soil moisture.



Proper weather predictions help in **scheduling harvesting activities**, reducing losses due to unexpected rain or extreme conditions.



## Technology in Weather-Based Farming

**GPS & Satellite Imagery:** Provides real-time data on weather patterns, improving precision farming techniques.

**IoT & Sensors:** Monitors soil moisture, temperature, and humidity for better farm management.

**AI & Machine Learning:** Enhances accuracy in weather predictions and provides actionable insights for agricultural planning.

**Mobile Apps & Alerts:** Delivers timely weather updates, allowing farmers to react promptly to changing conditions.

# Competitor Analysis

Brand	Strengths	Weaknesses	Lessons
 <b>Jaivik Kheti</b>	Government-backed initiative, dedicated platform for organic farmers, farming adoption at a national level.	Low adoption rate, Outdated UI/UX, No real-time advisory, Bureaucratic and slow updates	Integrate AI-driven insights, Ensure end-to-end marketplace features, Real-time alerts drive informed farming decisions.
 <b>Urja Farms</b>	Sustainability focus, contributing to eco-friendly practices in the farming industry.	No direct farmer-to-consumer (F2C) connection, Lacks real-time weather insights, No integrated logistics	Introduce F2C marketplace, Integrate AI-driven weather and farm insights, streamlined logistics and payments
 <b>Asmita Organic farms</b>	Commitment to Organic Farming, Localized Market Presence	Limited Technological Integration, No Direct Farmer-to-Consumer Marketplace, Lack of Personalized Advisory Services, No Weather-Based Insights	Utilizing real-time meteorological data, Integrating digital tools ,Developing a direct-to-consumer marketplace
 <b>Orgpick</b>	OrgPick prioritizes organic farmers, creating a sustainable and direct sales ecosystem.	Without AI-driven recommendations or weather-based analytics, farmers miss crucial data for optimizing productivity.	Integrating AI-driven insights and weather-based analytics can help farmers make informed decisions, improving efficiency and yields.
 <b>Big Basket</b>	Direct farm-to-consumer sales eliminate middlemen, allowing farmers to maximize their profits.	Small farmers struggle with brand visibility against established organic brands, reducing their market reach.	Providing marketing support and storytelling opportunities can help small farmers compete and build consumer trust.
 <b>ZeroMile</b>	Ensuring organic certification and clear product traceability enhances consumer trust and brand credibility.	Managing perishable organic goods effectively is critical to avoid spoilage and ensure timely deliveries.	Investing in a robust supply chain system will improve efficiency, reduce wastage, and enhance customer satisfaction.

# User Persona & Pain points



**Rajesh Kumar**  
Organic farmer

🎯 Goals

- Get **fair pricing** without **middlemen**.
- Sell **directly to consumers** with better profit margins.
- **Reduce wastage and financial losses** due to supply chain inefficiencies.
- Get quick, easy to understand **weather insights** for smart crop planning.

💡 Needs

- A **direct-to-consumer marketplace** to sell organic products without intermediaries.
- Access to **weather-based advisory services**.

## Critical (Must Solve)

He sells to wholesalers who take large commissions (30-40%).

### Limited Market Access

Farmers face significant crop losses and financial setbacks due to unexpected and extreme weather fluctuations.

### High Price & Limited Availability

Organic food is overpriced due to the involvement of middlemen compared to conventional food. Also, they have to hassle to find certified organic produce

### Lack of Weather Insights

## High (Should Solve)

Export dependency and fluctuating prices makes income uncertain.

### Price Volatility

Consumers lack transparency in the product journey and want clear traceability from farm to home.

### Transparency Issues

Struggles with using online marketplaces and digital payments.

### Digital Illiteracy

Language barriers limit farmers' access to information.

### Language Barriers

## Moderate (Could Solve)

Expensive and time-consuming organic certification process.

### Certification Barriers

Unclear organic certifications make it hard to verify authenticity.

### Certification Trust Issues

No proper storage facilities, leading to wastage.

### Lack of Storage & Logistics



**Priya Sharma**  
Consumer

🎯 Goals

- Buy **authentic, high-quality organic products** at a fair price.
- Ensure **trusted certification and traceability** of food.
- Support **sustainable and ethical farming** practices.
- Get organic food **delivered conveniently** without inflated costs.

💡 Needs

- A **verified organic marketplace** with transparent pricing.
- Consumer trust features, including **real-time certification checks** and **farm-to-table sourcing visibility**.

# App Interface for Organic Farmers

Provides **step-by-step guidance** to help farmers understand how to use the app effectively and troubleshoot common issues.

Farmers can upload detailed product information, including images and harvest time, to showcase their offerings effectively.

Provides farmers with **real-time insights** into their sales performance through live tracking, clear charts, and detailed product analytics.

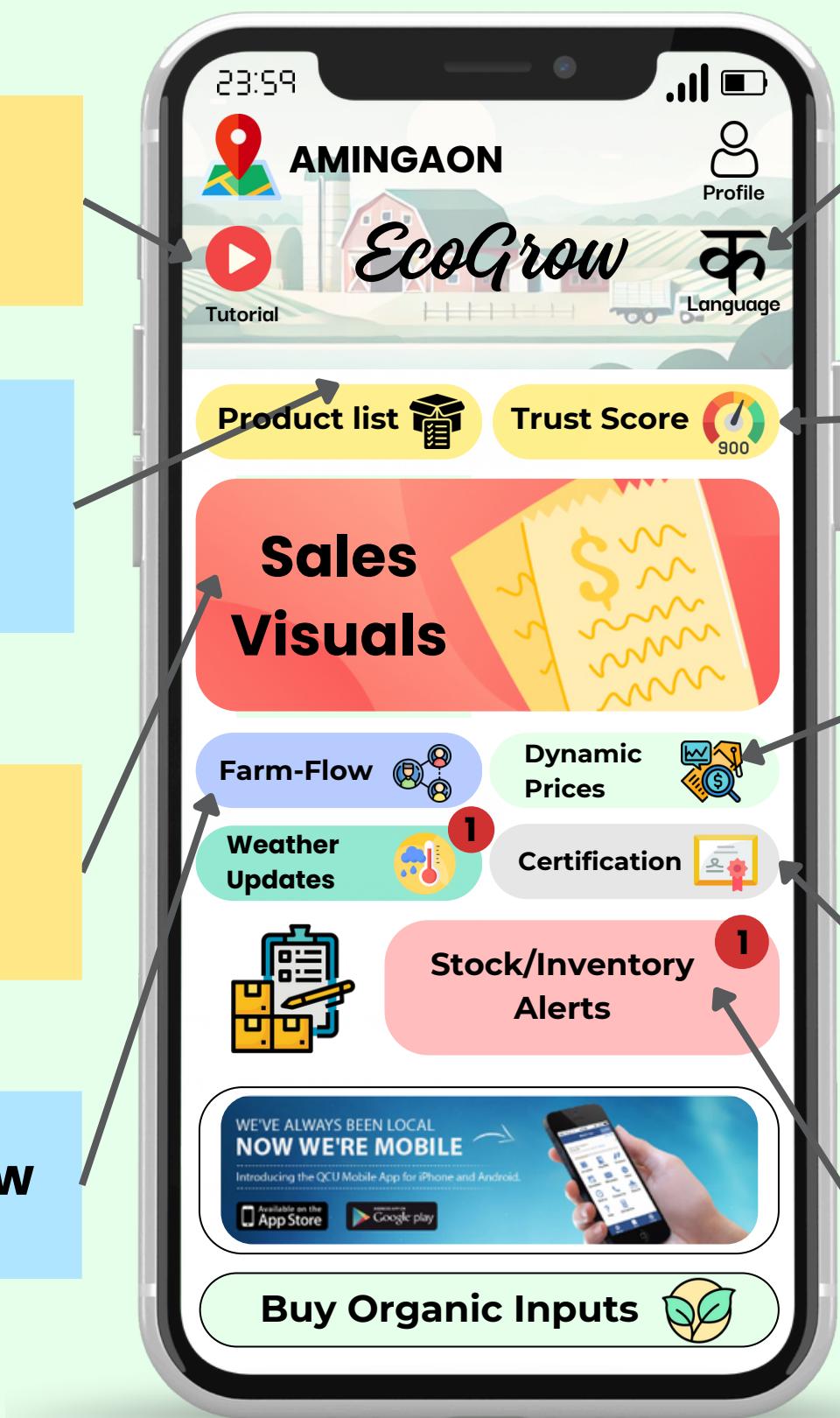
Connects organic farmers to consolidate **shipments, enabling shared transportation to our warehouse**, reducing costs, and enhancing efficiency.

## Video Tutorial

## Product List

## Sales Visuals

## Farm-Flow



## Multi-language option

## Trust score

## Dynamic Pricing

## Trust & Certification

## Stock/Inventory Alerts

The app supports **multiple languages** for easy use by farmers from diverse backgrounds.

Evaluates and displays a score based on certifications, customer reviews, and farmer interactions to ensure **reliability and transparency**.

AI analyzes market demand, regional trends, and competitor pricing to suggest **optimal rates**.

Farmers must submit **organic certification** documents for verification. In the future, we'll help streamline the certification process for easier access.

Stock/Inventory Alerts: Farmers get **real-time stock alerts** and **AI-powered yield forecasts** for better inventory management.

# App Interface for Consumers



# Weather & Meteorological Advisory Services

- Farmers can ask **questions via voice or text** (e.g., "When should I plant tomatoes?").
- AI chatbot **analyses real-time weather & farm conditions** to provide **instant, localised advice**.

## AI Chatbot for Instant Weather Guidance

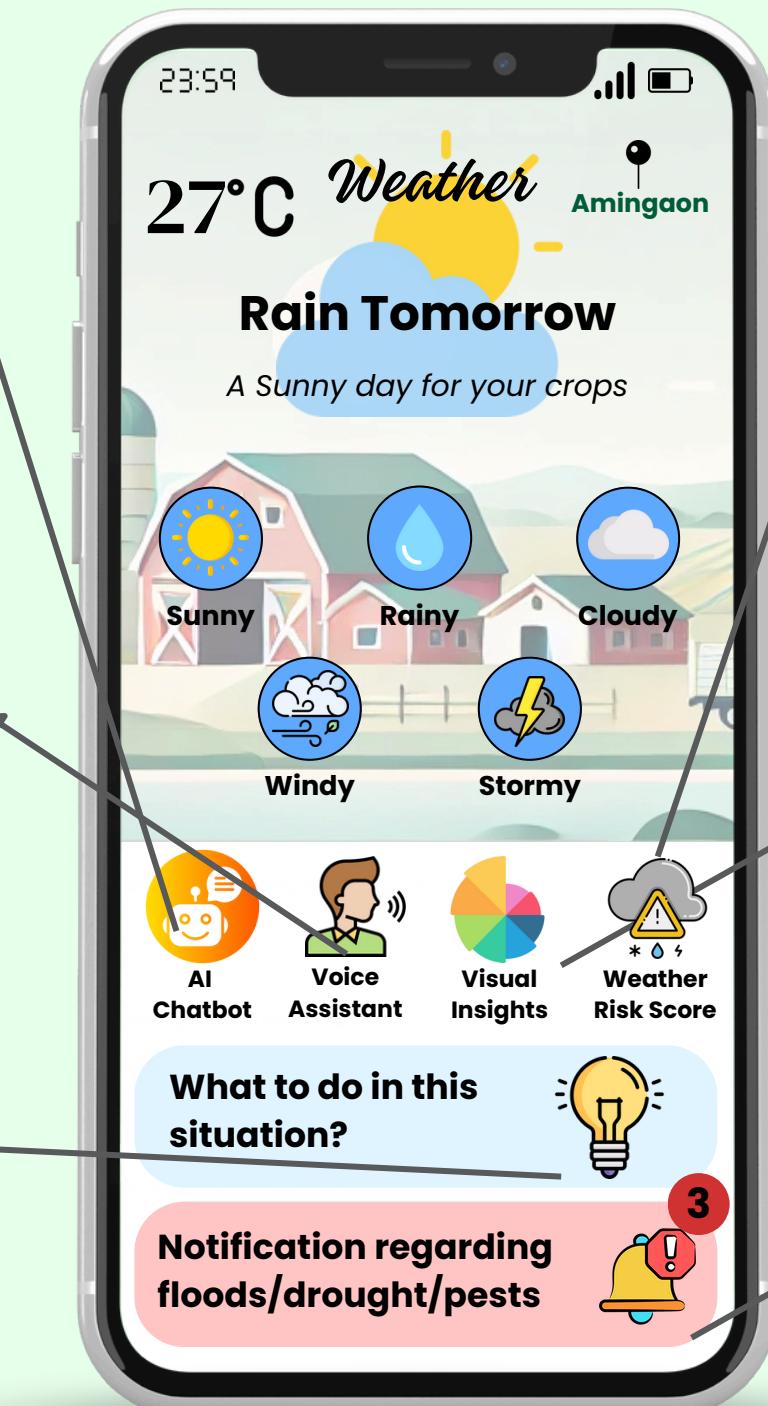
The app is designed for low-literacy farmers, offering:

- Voice alerts in regional languages
- Voice command support to ask for solutions in their regional language

## Multi-Language Support & Voice Assistance

Utilizes real-time data and advanced AI to detect potential challenges early and offer precise, tailored solutions. This enables proactive problem-solving, reducing risks and improving outcomes.

## Challenge Mitigation Feature



## Weather Risk Score

The app gives a Weather Risk Score (0-100) based on:

- The chance of crop damage from weather.
- How weather conditions may affect crop yield.
- Potential need for irrigation due to soil moisture levels.

## Visual Data Representation

Farmers can view simple, easy-to-understand graphs showing temperature trends, precipitation levels, and risk indicators.

## Alerts for possible upcoming challenges

Provides timely alerts for potential challenges, with AI-driven predictions ensuring accuracy and reliability. Alerts are delivered in both text and voice formats in regional languages for easy understanding.

# Logistics, Storage & Distribution

Challenges	Solutions
Perishable organic products require efficient cold storage & transportation.	Decentralized cold storage hubs & Automated temperature & humidity monitoring (IoT sensors).
High transportation costs due to fragmented supply chains.	Farmer-to-farmer logistics pooling (similar to cab sharing on onestop) & dynamic delivery pricing for consumers.
Farmers face long delays in reaching markets.	Geo-based order allocation to the warehouses & predictive demand mapping.
Lack of real-time inventory tracking leads to food waste.	AI-powered smart inventory forecasting.
High initial costs for establishing our own delivery network.	Micro-logistics partnerships & community-driven delivery models.

## An Overview



### Warehouse/Cold Storage

There is no infrastructure for **keeping products fresh** and **tracking the longevity** and freshness of products. There is **lack of AI-driven technologies** in storage.

### Organic Farms

Farmers face **issues in transporting their yields** from farms to the right consumers and **keeping their products fresh** for longer durations.

### Consumer

Consumers lack a trustable marketplace for buying **fresh organic products**. There is a lack of **robust transportation facilities**.

## Organic Farms

### Cold Storage & Warehousing

- **Decentralized Cold Storage Hubs** placed strategically near Urban Centers.
- **AI-Powered Inventory Management** tracks stock freshness & expiration dates using **IoT Sensors**.
- **Dynamic Storage Pricing** – We pay warehouses based on **storage duration & volume**, and accordingly we can adjust our “dynamic” pricing of products.

### AI-Powered Demand Forecasting

- **AI predicts demand trends** based on historical sales, seasonality, and market conditions, real-time inventory levels & consumer location.
- Farmers receive **real-time stock alerts** to avoid overproduction or shortages. **Predictive demand analysis** ensures farmers stock products with higher local demand.
- Automated **bulk order matching** – AI groups smaller orders into bulk shipments to reduce costs.

## Warehouse/Cold Storage

### Smart Route Optimization

- **Geo-Optimized Delivery Routing** – AI assigns nearest drivers for fastest farm-to-table delivery.
- **Multi-Drop Route Planning** – Reduces fuel costs & delivery time for bulk shipments.

### Supply Chain Transparency

- Each product is assigned a **unique blockchain ID** that tracks:
  - Farm Origin
  - Cold Storage Location & Temperature History
  - Real-Time Delivery Tracking
  - Customer Order & Purchase Verification
- Consumers can **scan a QR Code** on each product to **view its entire journey**.

## Consumer

# User Journey on our Marketplace



## Weather-based advisories

Farmers receive weather-based advisories based on their location and subscription model.



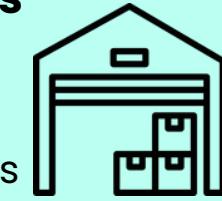
## Farmers receive feedback

Feedback is used to calculate farmers' trust score on the app, including reviews and any quality shortcomings.



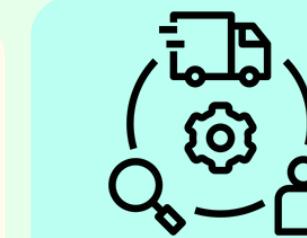
## Farmers transfer products to warehouses

Organic products are transferred by certified farmers to our cold storage.



## Farmers list products

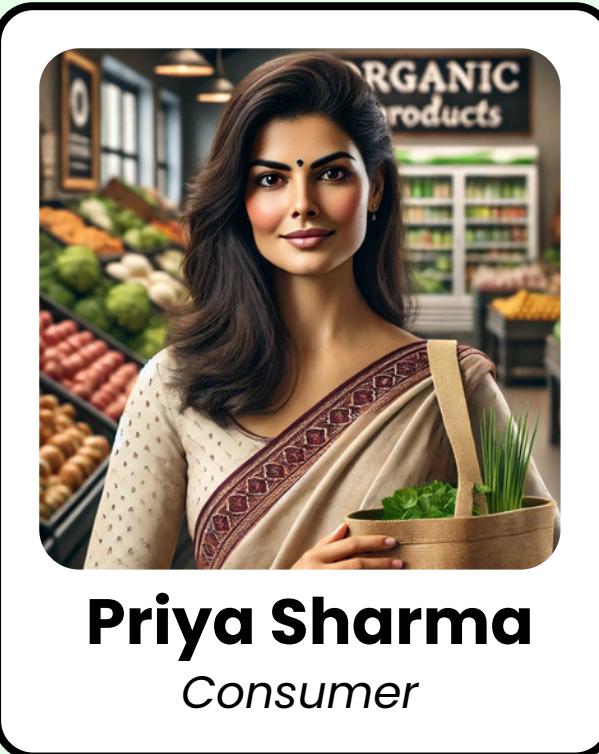
Farmers provide a list of organic products offered by them, which is stored in the database.



Logistics network ensures seamless delivery.

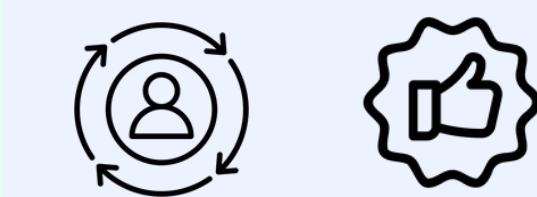
## Consumers browse and purchase

Consumers are able to browse different offerings in the app and purchase.



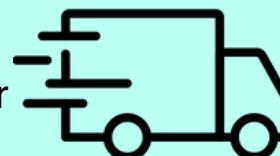
## Personalised recommendations

Consumers receive personalised recommendations and offers based on their purchase patterns.



## Products delivered to the consumer

Our delivery partners deliver fresh organic products to the consumers.



## Consumers review products

Feedback is collected from the consumers to identify quality and satisfaction gaps.



# Business Model Canvas

## Key Partners

- Organic farmers and cooperatives
- Agricultural research institutions and meteorological agencies
- Logistics and cold storage providers
- Government bodies for organic certification and subsidies
- Technology partners for AI, IoT, and blockchain integration
- E-commerce and digital payment service providers
- Local Delivery partners for seamless produce delivery

## Cost Structure

- Platform development and AI integration costs
- Logistics and warehousing expenses
- Farmer training and onboarding costs
- Marketing and customer acquisition expenses
- Blockchain and data security implementation
- Operational costs (customer support, platform maintenance)



## Key Activities

- Development and maintenance of the digital marketplace
- Integration of real-time weather and farming insights
- Onboarding and educating farmers on e-commerce and weather analytics
- Establishing partnerships for logistics and cold storage
- Trust-building measures (certification validation, blockchain-based traceability)
- Consumer engagement through personalized recommendations and loyalty programs



## Key Resources

- AI-driven marketplace and weather advisory platform
- Blockchain for transparent product tracking and certification verification
- Logistics and supply chain infrastructure for farm-to-consumer delivery
- Data analytics for pricing optimization and demand forecasting
- Farmer support system (training, digital literacy, weather risk management)
- Financial resources for expansion and scaling



## Value Propositions

### For Farmers:

- Direct access to consumers, eliminating middlemen and increasing profits
- AI-powered weather and farming insights to optimize production
- Affordable organic certification programs and financial support
- Seamless logistics and cold storage solutions

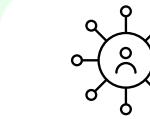
### For Consumers:

- Verified organic products with real-time certification tracking
- Fair pricing due to reduced intermediary costs
- Personalized recommendations based on past purchases and preferences
- Transparency in sourcing with blockchain-powered trust scores



## Customer Relationship

- AI-driven chatbot for farming and weather guidance
- 24/7 customer and farmer support in multiple languages
- Community engagement via forums, blogs, and social media
- Review and rating system for farmers and products
- Subscription models for recurring organic produce orders



## Channels

- Mobile app and web platform for buying and selling
- Social media and influencer marketing for brand awareness
- Farmer training workshops and digital literacy programs
- Integration with existing e-commerce platforms (Amazon, Flipkart)
- B2B partnerships with organic food suppliers and retailers



## Revenue Stream

- Transaction commission on each sale
- Premium weather advisory subscriptions for farmers
- Data analytics and demand forecasting services
- Advertising and sponsored product placements
- B2B sales to restaurants, retailers, and exporters
- Subscription-based organic produce delivery for consumers

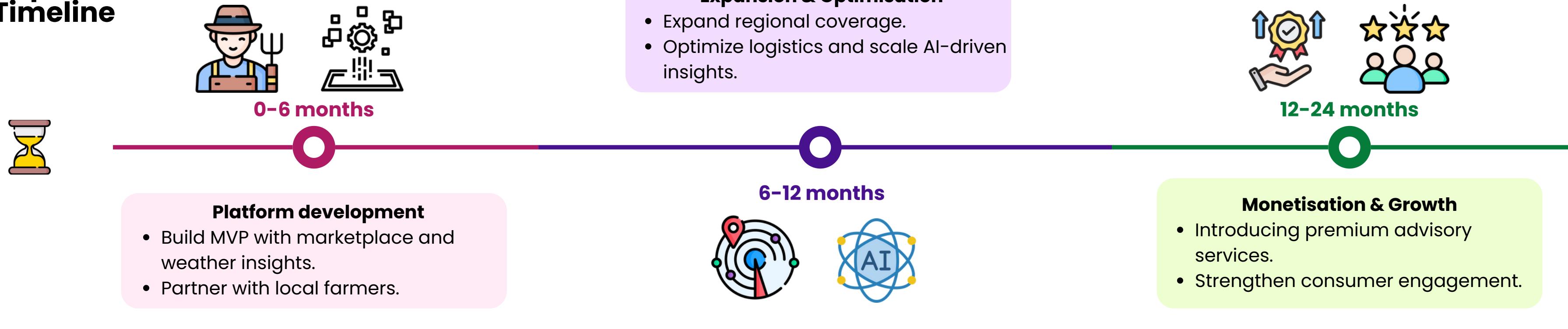


## Customer Segments

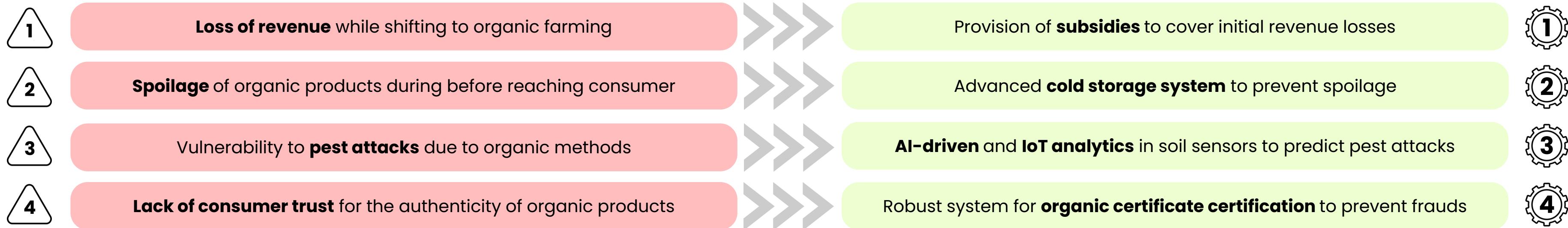
- Organic farmers (small-scale and commercial)
- Health-conscious consumers and families
- Urban professionals seeking convenience
- Sustainable and ethical food advocates
- Restaurants, hotels, and organic retailers
- Exporters looking for traceable organic produce

# Implementation Strategy

## Implementation Timeline



## Risk Mitigation



## Expansion

Phase 1: Local Market Penetration (0-12 months)

Phase 2: Regional & National Expansion (12-36 months)

Phase 3: International & Export Growth (36+ months)

# Expansion Strategy

## Phase 1: Local Market Penetration (0–12 months)

Focus on onboarding 500+ farmers, building trust through field agents, certifications, and escrow payments. Grow consumer adoption via referral programs, influencer marketing, and local farmer markets.

### Empowering Farmers & Building Trust

- Digital **literacy support** via field agents, tutorials, and voice-based onboarding.
- Trust-building measures** like escrow payments, buyer reviews, and certification verification.



### Onboarding & Scaling Farmer Participation

- Onboard 500+ farmers** through awareness campaigns and free training.
- Deploy **field agents & cooperatives** for hands-on onboarding support.



### Driving Consumer Adoption & Engagement

- Referral & influencer marketing** to attract urban consumers and businesses.
- Local markets & digital ads** to boost awareness and sales.



### Farmer Expansion & Smart Logistics

- Farmer Growth & Onboarding:** Scale from 500 to 5,000 farmers via cooperatives, financing, and AI-driven yield predictions.
- Logistics & Pricing Optimization:** Implement smart cold storage, optimized delivery, and AI-powered pricing for better farmer earnings.



### B2B & Bulk Wholesale Growth

- Market Expansion:** Expand into supermarkets, restaurants, and global export markets.
- B2B Features & Partnerships:** Launch a B2B marketplace, corporate partnerships, and subscription models for bulk buyers.



### AI-Driven Supply Chain Optimization

- Demand Forecasting & Waste Reduction:** Use AI for demand forecasting to minimize overstock and waste.
- Logistics & Cost Efficiency:** Implement dynamic delivery routing and P2P logistics pooling to cut costs.



## Phase 2: Regional & National Expansion (12–36 months)

Scale to 5,000+ farmers, introduce AI-driven logistics, and launch B2B wholesale for supermarkets, hotels, and restaurants. Implement AI-powered pricing, financing support, and predictive yield analysis.

## Phase 3: International & Export Growth (36+ months)

Expand into global markets with AI-driven trade matching, export compliance support, and blockchain tracking. Set up international logistics, regional licensing, and multi-language platform integration.

### Global Market Expansion & Smart Exports

- Targeting **high-growth regions** (USA, EU, Middle East, Asia) for organic produce exports.
- Facilitating **global trade with export compliance support**, AI-driven market matching, and blockchain-powered tracking.



### Franchising & Localized Market Penetration

- Expanding internationally through **regional licensing** and **partnerships** with local businesses.
- Optimizing logistics with **smart warehousing, cold chain hubs**, and multi-language payment integration.



### AI-Powered Global Growth Strategies

- Using AI for **predictive expansion**, analyzing demand trends and climate risks for better crop recommendations.
- Automating pricing models** to optimize farm earnings based on global and regional market conditions.



# Financial Analysis

**Considering We Have Onboarded Organic Farmers (approx. 500)**

**Total Yearly Sales : 3.04 cr. rupees**

Revenue Streams	Assumed Values	Final Revenue in numbers
<b>Transaction Fees</b>	A 5% commision is charged on each transaction that takes place on the application.	<b>15 lac rupees</b>
<b>Premium Plans for farmers</b>	Assuming that about 10% farmers purchase the silver plan, 5% purchase the gold plan and none of the farmers purchase the platinum plan.	<b>80k rupees</b>
<b>Advertisements</b>	Assuming ads are put with a 0.077 rupees per click rate. And assuming we have a potential customer base of 100K	<b>92.4k rupees</b>
<b>Consumer Basket Subscription</b>	Assuming 50,000 active users out of which 20% have subscribed to the basket subscription which we have priced at 100 rupees	<b>11 lac rupees</b>

## • Potential Revenue Streams •

↓  
**Data  
Monetization &  
Predictive  
Analytics for  
Agribusinesses**

**Financial  
Services for  
Farmers (Micro-  
Loans & Crop  
Insurance)**

**Farm Inputs  
Marketplace  
(Organic Pesticides,  
Fertilizers, &  
Equipment)**

**Total Revenue : 27.72 lac rupees**

# Financial Analysis:

## Costs

### One-Time Costs

Requirements	Costs(in rs.)
App Development	35 lacs
AI Chatbot/Voice assistant	3 lacs

### Continuing Costs

Requirements	Costs(in rs.)
App Management & Dynamic QR code generation	2 lacs
Cold Storages	2 lacs
Logistics	10 lacs
IOT Sensors	2 lacs

**Total Costs : 54 lac rupees**

**Our Startup Will Breakeven after a period of approximately 1.5 years.**

# Key Metrics for measuring success

Solution	Metrics	Frequency	Baseline Metric	Target Value
 <b>North Star Metric</b>	User Engagement & Transaction Volume (Active farmers & consumers, Growth in transactions, Repeat purchases)	Monthly, Quarterly	Current engagement and transaction levels	Continuous growth in active users, transactions, and repeat purchase rates
<b>Weather Risk Score</b>	Adoption rate, Risk score usage, Impact on crop yield	Weekly, Monthly, Quarterly	Low adoption, Limited risk score usage	10-20% increase in adoption, Improved crop yield impact
<b>AI Chatbot for Instant Weather Guidance</b>	Query response rate, User satisfaction, Frequency of usage	Daily, Weekly, Monthly	Low query resolution, Moderate user satisfaction	80-90% query resolution, High user satisfaction
<b>Multi-Language Support &amp; Voice Assistance</b>	Language option usage rate, User engagement in regional languages	Monthly, Quarterly	Limited language support usage	50-60% usage in regional languages
<b>Offline Mode (For Remote Areas)</b>	Offline feature usage rate, User engagement in remote areas	Monthly, Quarterly	Low offline mode engagement	70-80% offline feature engagement
<b>Visual Data Representation</b>	Graph usage rate, User understanding of weather trends	Weekly, Monthly	Moderate graph usage, Average user understanding	Increased graph usage, Improved understanding
<b>Alert for Possible Upcoming Challenges</b>	Alert effectiveness, User response to alerts	Daily, Weekly	Limited alert effectiveness	85-90% alert effectiveness, Prompt user responses



# Appendix

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