**JaivikSetu**

**“हर घर तक जैविक उत्पाद,  
हर किसान तक सही बाज़ार!”**

**“Organic products to every home, a fair market to every farmer!”**

Ketaknown

Ketaknown(Keta means Strength) Members:

Janvi Chauhan (Team Manager)

Role:-Backend Developer,Oversees the project planning,Team Cordination and timelines.

Tirth Gohel

Role:-Frontend Developer

Ansh Yadav

Role:-Full Stack Developer

Tej Doshi

Role:-Backend Developer

Problem Statement

Farmers practicing natural farming struggle to find reliable buyers, often relying on middlemen who reduce their profits. Consumers looking for organic, chemical-free food face difficulty verifying authenticity, leading to trust issues in the organic market. There is no direct system ensuring transparency between farmers and consumers.

**Farmers lack direct access to buyers**, forcing them to depend on local markets or intermediaries.  
**Consumers have no easy way to verify** if a product is genuinely organic.  
**No transparency or certification system** builds trust between both parties.  
**The absence of a direct connection** makes organic markets unreliable and unstructured.

Problem Analysis :

In today’s market, **fake organic labels** and **unverified claims** are common, making it hard for consumers to differentiate between **genuine organic products** and commercially grown ones involving pesticides and insecticides . **Farmers lack a direct connection** to consumers, which means they **earn less** while buyers **pay more** due to unnecessary middlemen.

**Fake organic labels and unverified claims** mislead consumers, making it difficult to identify truly organic products.

**Pesticides and insecticide usage** in commercially grown products remains unchecked due to a lack of transparency.

**Farmers lack direct access to consumers**, reducing their earnings while middlemen increase costs for buyers.

**No proper verification system** exists for consumers to confirm product authenticity before purchase.

**Digital certification and QR codes** can help **trace product origin**, ensuring trust and fair pricing.

**Limited market access for farmers** prevents them from sustaining their natural farming practices.

**Non-transparent systems and uncertified products** mislead buyers, weakening consumer confidence in organic markets.

Targeted Audience:

**Farmers** – Small and mid-sized natural farmers who need a **better market without middlemen**.  
 **Consumers** – Health-conscious buyers who want **trustworthy organic products**.  
 **Retailers & Restaurants** – Businesses that need **certified organic produce**.

**Solution Overview:**

**Digital Marketplace:** A platform that directly connects **natural farmers with conscious consumers**.

**Farmer Verification:** Only **certified natural farmers** can sell on the platform, ensuring authenticity.

**Consumer Trust:** **QR code-based traceability** allows buyers to verify **product origin, farming methods, and certification details** in real-time.

**Elimination of Middlemen:** Farmers receive **fair pricing**, and consumers get **affordable, genuine organic food**.

**Addressing Key Issues:**

* **Farmers struggle with market access** and fair prices.
* **Consumers face trust issues** due to fake organic products.
* **Middlemen inflate costs**, reducing farmer profits and increasing consumer prices.

**JaivikSetu’s Solution:** A **transparent digital platform** that directly connects **verified farmers and consumers**, ensuring **trust, authenticity, and fair trade**.

**Approach: How Our Solution Works**

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**Farmer Verification**

* Farmers submit **documents, land details, and farming practices** for review.
* A **third-party inspection team** verifies claims before certifying farmers as **authentic organic producers**.

**QR Code Generation**

* Once verified, each product receives a **unique QR code** linking to **its origin, farming methods, and certification details**.
* Consumers can **scan the QR code** before purchase to ensure authenticity.

**Direct Selling Marketplace**

* **Verified farmers list** their organic products at **fair prices**.
* Consumers can **browse, filter, and purchase directly**, removing **middlemen** and reducing costs.

**Order & Delivery Management**

* Supports **easy ordering, secure payments, and doorstep delivery**.
* Ensures **authentic organic food reaches consumers hassle-free**.

**Some important points to be taken care of :-**

**1)Managing and showcasing of the fair pricing**

**No Middleman**: By connecting farmers directly with consumers, you eliminate intermediary costs. Display the savings from this approach on the product page so consumers can see the difference in pricing compared to traditional market prices.

**Fair Profit Margin**: Allow farmers to set their own prices with an option to recommend a fair margin above their costs.

**2)Management of the farmer verification and Details needed for the document verification.**

**1️ Farmer Registration & Profile Setup**

* Farmers **sign up** with name, farm location, and contact details.
* Provide **bank details** for direct payments.

**2️ Submission of Required Documents**

* **Farm Identity Proof** – Aadhar Card, Land Records, or Lease Agreement.
* **Organic Certification** – PGS(Participatory Guarantee System) Certificate or Third-Party Organic Certification (if available).
* **Farm Details** – Size, type, crops grown, and farming methods used.
* **Proof of Natural Farming Practices** –
  + 📸 **Farm Photos** (fields, composting, organic inputs).
  + 🧾 **Receipts for organic seeds, compost, and natural pesticides**.

**3️ Third-Party Verification Process**

* Inspectors **visit the farm** to check:  
   **Soil Health** – No synthetic fertilizers.  
   **Pest Management** – Use of natural pesticides.

**Water & Waste Management** – Eco-friendly farming techniques.  
 **Crop Management** – Crop rotation, organic manure, and sustainable practices.

**4️ Admin Review & Approval**

* Admin **verifies submitted documents** and inspection reports.
* If approved, the **farmer receives a certification badge** and can list products.
* If rejected, the farmer is given **guidance on corrections**.

**5️ Product Listing & Activation**

* Once verified, farmers can **upload products**, set prices, and generate **QR codes** for consumer traceability.

### ****Certification Timeline (48-Hour Approval)****

✅ **1️⃣ Document Upload** – Farmers submit required documents (takes up to **1 day**).  
✅ **2️⃣ Third-Party Inspection** – On-site verification, completed within **a few hours to a day**.  
✅ **3️⃣ Review & Approval** – Findings are reviewed, and certification is **approved or denied in 48 hours**.  
✅ **4️⃣ Certificate Issuance** – If approved, the digital certificate is **generated and available on the farmer’s profile**.

Reverification of the products

**Annual Farmer Reverification**

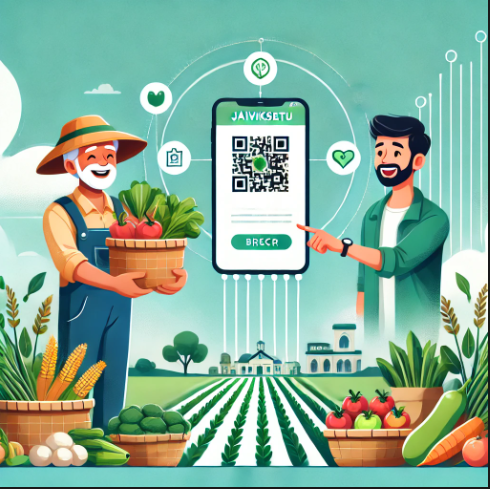
* Farmers must undergo **reverification once a year** to ensure they continue following **organic/natural farming practices**.
* They need to **resubmit updated documents, farm photos, and crop logs** for review.

**Seasonal Product Batch Verification**

* For perishable crops, **batch-wise verification is required every season** (e.g., wheat in Rabi season, rice in Kharif season).
* This should be once atleast 2-3 months.

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QR Based Information



#### **1. Farmer QR Code:**

* Farmer’s details (name, farm location, history)
* Certification details (organic, fair trade, etc.)
* Proof of natural farming practices (photos, audits)
* Sustainability and eco-friendly practices
* Direct Link to the farmer’s products

#### **2. Product QR Code:**

* Product-specific details (name, batch number, harvest date)
* Photos/videos showing natural harvesting methods
* Testing reports (e.g., pesticide residue, chemical-free)
* Traceability from farm to consumer (timeline, farm location)
* Certification and compliance evidence
* Ratings and reviews
* **Interactive Platform**: The QR codes should link to an interactive web platform where the consumer can see detailed reports, images, and videos. It should be mobile-friendly for easy access.

Middleman elimination

**How JaivikSetu Eliminates Middlemen 🚫🛒**

✅ **Direct Farmer-to-Consumer Marketplace** – Farmers list products directly on JaivikSetu, bypassing wholesalers, traders, and brokers.

✅ **QR Code-Based Transparency** – Every farmer and product gets a **unique QR code** that consumers can scan to check farm location, certification, and farming methods.

✅ **Transparent Pricing & Fair Trade** – Farmers **set their own prices** based on **production costs**, ensuring fair earnings without middlemen price manipulation.

✅ **Secure Digital Payments & Direct Transactions** – Consumers pay **directly to farmers** via **UPI, Bank Transfer, or Wallet**, removing commission cuts from middlemen.

✅ **Logistics & Delivery Without Intermediaries** – Farmers can **manage their own deliveries** or use partnered **logistics services**, avoiding third-party distributors.

**📌 Example: Eliminating Middlemen in Organic Mango Sales**

✅ **Traditional Market:** A farmer sells **mangoes to a middleman for ₹50/kg**. The middleman **sells to a retailer for ₹80/kg**, and the retailer **sells to consumers for ₹120/kg**. The farmer **earns only ₹50/kg**, while consumers **pay ₹120/kg**.

✅ **With JaivikSetu:** The farmer **lists mangoes directly for ₹80/kg**, and consumers buy **without price inflation**. The farmer **earns ₹30 more per kg**, and the consumer **saves ₹40 per kg**.

Management of the Delievery

**Order Processing & Farmer Notification** – When a consumer places an order, the **nearest farmer receives an instant notification** via SMS, email, or dashboard alert.

✅ **2️⃣ Smart Delivery Allocation** – The system **automatically assigns the delivery method** based on the farmer’s location:

* **Nearby Farmers (Local Delivery)** 🏡 – If the farmer is **within a short distance**, the order is sent to **Blinkit, Zepto, Dunzo, or any instant delivery partner** for **fast, same-day delivery**.
* **Distant Farmers (Long-Distance Shipping)** 📦 – If the farmer is **far from the consumer**, the order is assigned to ONDC Logistic provider (e.g,**DHL, Delhivery, India Post)**.

✅ **3️⃣ Real-Time Tracking & Status Updates** – Consumers can **track their orders live**, receiving updates about packaging, dispatch, and expected delivery time.

✅ **4️⃣ Seamless Payment & Order Completion** – Payment is processed securely, and once the order is delivered, consumers confirm receipt and leave a **rating/review**.

This hybrid model **ensures faster deliveries for local farmers while enabling long-distance farmers to reach a wider audience efficiently**.

How will you manage orders ?

**How JaivikSetu Will Manage Orders Efficiently**

✅ **1️⃣ Order Placement & Notification**

* Consumers **browse products**, add to cart, and place orders directly from verified farmers.
* Farmers receive **instant notifications** via **SMS, email, or dashboard alerts**.

✅ **2️⃣ Smart Delivery Allocation**

* If the farmer is **near the consumer**, the system assigns the order to **instant delivery services** (Blinkit, Zepto, Dunzo) for **same-day delivery**.
* If the farmer is **far away**, the system assigns the order to **long-distance logistics providers** (DHL, Delhivery, India Post) for **standard shipping**.

✅ **3️⃣ Payment Processing**

* Consumers make **secure payments via UPI, Bank Transfer, Wallets, or COD (if available)**.
* The platform **holds payments** until order confirmation to ensure smooth transactions.

✅ **4️⃣ Packaging & QR Code Labeling**

* Farmers **package products securely** and attach **QR codes** for authenticity and traceability.

✅ **5️⃣ Order Tracking & Status Updates**

* Consumers receive **real-time tracking updates** via the website and SMS/email.
* Updates include **order processing, packaging, dispatch, estimated delivery time**.

✅ **6️⃣ Delivery & Confirmation**

* The **assigned logistics partner delivers the product** to the consumer.
* Consumers **confirm receipt** and leave a **rating/review** on the platform.

✅ **7️⃣ Customer Support & Dispute Resolution**

* If any issue arises (damaged product, delayed delivery), consumers can **raise a dispute** via **customer support**, and JaivikSetu will assist in resolution.

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advantages for the farmers and consumers for using this platform

### ****Farmers' Benefits****

1️ **Direct Sales & Higher Profits** – No middlemen, **fair pricing**, and better earnings.  
2️ **Wider Market Reach** – Sell across cities, reaching **urban consumers**.  
3️ **Trust & Transparency** – QR-based verification ensures **genuine organic sales**.  
4️ **Flexible Delivery Options** – Self-delivery or logistics partners like **Blinkit, DHL, Delhivery**.  
5️ **Secure & Fast Payments** – Get paid directly via **UPI, Bank Transfer, or Wallets**.

### ****Consumers' Benefits****

1️ **100% Authentic Organic Food** – Buy **directly from verified farmers**.  
2️ **Fair & Affordable Pricing** – No middlemen markups, lower costs.  
3️ **QR Code Traceability** – Check **farm details & certification** before purchase.  
4️ **Convenient Delivery** – **Instant delivery (Blinkit, Dunzo) or nationwide shipping**.  
5️ **Secure Payments & Order Tracking** – Smooth transactions with **live tracking**.

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Uniqueness:

Our platform is unlike other organic markets; it cuts the middleman and offers traceability in real time with the use of QR codes and ensures a certification process, thus letting only genuine organic farmers participate, thereby making it simpler, more transparent, and fairer for farmers and consumers.

Direct Farmer-to-Consumer Sales – Eliminates middlemen, ensuring fair pricing for both farmers and buyers.

QR Code-Based Transparency – Consumers can verify product origin, farming methods, and certifications before purchase.

Smart Delivery System – Uses instant delivery (Blinkit, Dunzo) for nearby farmers and logistics partners (DHL, Delhivery) for distant ones.

Certified Organic Marketplace – Only verified natural farmers can sell, ensuring genuine organic products.

Fair & Seasonal Pricing – Farmers set their own prices based on harvest cycles and demand, promoting sustainable trade.

Secure & Instant Payments – Supports UPI, Bank Transfers, and Wallets, ensuring hassle-free transactions.

Frameworks/Technologies

React bases our frontend on speed, flexibility, and last but not least, ease of use. This brings us smooth interactivity- Product consumers will be able to browse products without delay by farmers managing their listings. React's component-based structure enables better organization of codes and reusability, making it easy for scaling and further updating. Robert Kingston claims that it's immense support community offers no shortage of help should the developers need it or wish to add further features.

Working with Django at the backend with Django REST Framework is just right because it is security-proven, reliable, and robust. With inherited features, Django eases the task of user management and data handling and ensures secure storage and transfer, while DRF is a very easy tool for the frontend to communicate using cleaner and well-organized APIs. Scalability from Django means that we are even being sure the system would be able to continue dealing with increased data as more farmers and consumers join the system.

This React-Django setup is cheap since both are open-source and fit perfectly into reasonably priced cloud solutions like, for speed, security, and scalability: Everything we need to scale there's no need for expensive tools or licenses.

Feasibility and Implementation

Implementation Ease

Effectiveness

Effectiveness refers to how well JaivikSetu solves the problems faced by farmers and consumers. It explains how successfully your platform achieves its goals.

Eliminates Middlemen – Ensures farmers earn more and consumers pay less by enabling direct sales.

Builds Trust with QR Codes – Consumers can scan and verify farm details, ensuring authentic organic products.

Expands Market Reach for Farmers – Small farmers can sell nationwide, even reaching city consumers.

Ensures Fast & Reliable Delivery – Smart allocation to Blinkit (local) or DHL (distant) for seamless logistics.

Encourages Fair & Seasonal Pricing – Farmers set their own prices based on harvest cycles and demand.

Accessibility Considerations: Highlight design decisions for broader accessibility.

✅ **Simple & User-Friendly UI** – Clean, **easy-to-navigate dashboard** for farmers and buyers, even with **low digital literacy**.

✅ **Multi-Language Support** – Farmers can **access the platform in regional languages** for better usability.