ENABLING FARM-TO-FORK VALUE-CHAIN FOR PERISHABLES
TECHNOLOGY LED SOLUTIONS FOR AGRI SUPPLY CHAIN

PRODUCE
- Solar Pump Controller
- Solar Water Pump
- Solar Pump Service Platform

30,000 FARMS ENABLED

MANAGE
- Solar Cold Room
- Battery Less Backup
- Portable

32,000MT COMMODITY WASTAGE SAVED

MARKET
- Market Connect Platform
- Better Earning
- Cold Chain Enabled

100MT FARTHER MARKET TRANSACTIONS
USING TECHNOLOGY TO DISRUPT THE WAY PERISHABLES ARE HANDLED ACROSS VALUE CHAIN
only 34.3% ARABLE LAND IS IRRIGATED
BUT
7.3 BN USD

PRODUCE WASTED EVERY YEAR
First of its kind truly portable solar based cold room technology without the need for batteries.

- 20% MORE EFFICIENT
- TRULY PORTABLE
- PATENTS FILED
- REMOTE SENSING & PREDICTIVE ANALYSIS
- TEMPERATURE 4°C - 10°C
- 20 x 8 x 8 FT 5MT CAPACITY

Extend life by up to 10X to sell later in local market.
Reach markets up to 3X farther using a normal truck to sell without spoilage.
Reach markets 10X farther using a reefer truck to sell anywhere without spoilage.
Ecofrost

Very Easy

Normal Cold Store

Smart and Connected

- Minute-by-minute stream of data
- Auto service-ticketing, tracking and reporting
- Predictive, diagnostic and prescriptive analytics
- On-board storage. Control via mobile device
- Remote control and troubleshooting
- Over the air software updates and configuration
THE NEW ECOFROST LINK
UPFRONT PURCHASE

LEASE AND RENTAL

COMMUNITY MODEL
IMMEDIATE PAYBACK MODEL

Farmer pays 25000 INR rent for Ecofrost and gets assurance of 2500 Kg Commodity Purchase at a higher than Market Price through Eco-connect.
ec रण बेचो,  
ec रण खरीदो!
SMART AND CONNECTED
Tomato, 2000 kg, 14 Rs/kg
QUALITY APP

ECO - QUALITY CHECK

Details

Demand/Supply *
- Demand
- Supply

PO ID *

Commodity *

Quantity *

Packaging Details

Package Quantity

Packaging material photo 1

Drag and drop a file here or click
Complete packaging material photo with the commodity

Packaging material photo 2

Drag and drop a file here or click

ECO - QUALITY CHECK

Details

Litchi Guidelines

NOTE:

- Fruits should be picked from tree at cooler time of the day, preferably in the morning.
- Do not keep harvested fruit in direct sunlight.
- Fruits should be...
FRESHNESS METER

Image based automation of quality checks to grade and sort commodities

10-point quality checks within minutes

Use cases in sourcing and distribution

<table>
<thead>
<tr>
<th>Feature</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Skin</td>
<td>3.9</td>
</tr>
<tr>
<td>Disease</td>
<td>4.5</td>
</tr>
<tr>
<td>Rot</td>
<td>4.9</td>
</tr>
<tr>
<td>Damage</td>
<td>4.1</td>
</tr>
<tr>
<td>Colour</td>
<td>4.5</td>
</tr>
<tr>
<td>Size</td>
<td>4.9</td>
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</table>
**TRACEABILITY**

**FnP Team** placed an order

Pomegranate - Bhaagwa - Fresh - 200gm - 750 kg
Order ID: FPEZ15020002 created

**Econoconnect Team** confirmed order request

**Econoconnect Team** created order and quality inspection done

<table>
<thead>
<tr>
<th>Package ID</th>
<th>Commodity</th>
<th>Origin</th>
<th>Variety</th>
<th>Package Size</th>
<th>Fruit Weight</th>
<th>Fruit Diameter</th>
<th>Fruit Colour</th>
<th>Precooled</th>
<th>Outward Quality</th>
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<tbody>
<tr>
<td>J076_TR125</td>
<td>Pomegranate</td>
<td>Satara</td>
<td>Bhaagwa</td>
<td>10 kg</td>
<td>205 gm</td>
<td>116 mm</td>
<td>Pinkish Red</td>
<td>Yes</td>
<td>★★★★☆</td>
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<tr>
<td>J076_TR126</td>
<td>Pomegranate</td>
<td>Satara</td>
<td>Bhaagwa</td>
<td>10 kg</td>
<td>220 gm</td>
<td>108 mm</td>
<td>Red with sunpots</td>
<td>Yes</td>
<td>★★★★☆</td>
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</table>

**Econoconnect Team** uploaded new photos

![Pomegranate Images](image1.jpg)

**Econoconnect Team** shipped order to destination

© 09.31 AM

© 08:55 AM

© 02:18 PM

© 02:20 PM

© 03:34 PM
ACCESS TO FARTHER MARKET

- Farm with No Pre-Cooling
  - Local/Nearby Market (300 Kms)

- Farm with Pre-Cooling & Access to Information
  - Farther Market (900 Kms)
  - Inter-State Markets (3000 Kms)
  - Export Market (5000+ Kms)
The farmer sent 10 MT of flowers from Ahmednagar, MH, to Hyderabad market in normal vehicle.

He was able to sell produce worth Rs 25/kg at Rs 200/kg.
50% INCREASE IN INCOME
Proof of concept: 15% reduction in losses due to pre-cooling only in Fig without temperature-controlled transport, and 25% reduction in losses with cold logistics & pre-cooling.

Proof of concept: Pomegranate demand aggregation due to Ecofrost lead to reduction in transport & logistics cost from 13 Rs/kg to 7Rs/kg; thereby boosting Gross Margins from 10% to 17%.
COLD CHAIN IMPACT – CHERRY

Harvesting at Cherry Farm in Narkanda, Shimla (Day 0, 9 am)

15 km

Pre-Cooling in Ecofrost at Narkanda, Shimla (Day 0, 11 am – 4 pm)

400 km

Arrival at Delhi (Day 1, 6 am)

Arrival at Mumbai (Day 1, 6 pm)

1400 km

Pre-Cooling + Cold Chain Transportation

Arrival at Store at Saptapur (Day 2, 10 am)

20 km

Type | Treatment
--- | ---
T1 | Ambient
T2 | Pre-Cooling + Ambient Transportation
T3 | Pre-Cooling + Cold Chain Transportation

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>Acceptance</th>
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<tbody>
<tr>
<td>T1</td>
<td>50%</td>
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<tr>
<td>T2</td>
<td>80%</td>
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<tr>
<td>T3</td>
<td>87%</td>
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</table>
COLD CHAIN EXPERIMENT – CHERRY

Sample at Farm Gate

Sample in Cold Room

T1 sample at Store

T2 sample at Store

T3 sample at Store
COMMODITIES HANDLED DURING COVID 19

- Litchi
- Peach
- Fig
- Pomegranate
- Cherry
- Grapes
- Strawberry
- Mango
200 PEOPLE 30,000 FARMERS 5 COUNTRIES
100,000 FARMS
25 Million PEOPLE

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