Empowering farmers and women's self-help groups through the provision of solar-powered cold storage units.

The city of Rourkela is developing cold rooms in five markets across the city to increase the shelf life of vegetables from farmers and reduce distress selling. Trained women’s self-help groups will be operating the cold rooms.
THE PROBLEM

Small-scale farmers in Rourkela face many difficult situations.

• Low access to large markets: Being small-scale, these farmers do not have direct access to bulk buyers and are reliant on middlemen.

• Distress selling: Farmers are forced to sell their produce at a very low rate by the end of the market day.
  • 20-40% of the vegetables like Cabbage, Tomato are being sold below market price. Most farm produce have a shelf life of 4 days.

The pilot survey indicates that 83% of farmers/vendors stated the lack of storage options as the main driving factor for distress selling.
Action 1 - Infrastructure

• Five solar powered cold rooms in vegetable markets owned by the Municipality.
• Each cold room to be used by 120 to 160 farmers.
• Three-independent cooling chambers.
• Thermal storage gives 24-hour power back-up.
• 5 year maintenance agreement

• Farmers live in outskirt of the city.
• Charge for a day’s storage is 3 INR (0.036 $)/ 15kg.
• Vegetables- tomato, cabbage, egg plant, pumpkin, beans.
• Fruits - watermelon, banana, apples
Cold rooms are operated by women co-operatives selected by the municipality.
Each cold room has 5-7 women working.
Technical and management skills for cold room operations.

Hand-holding and financial incentive for cold room operation for 18 months.
Community operated and owned by the municipality ensuring sustainability.
Action 3 – Multiple Income Streams

- Steady income sources are must for sustainability.
- Diversification of income sources.
- Reduce operational expenses.

- Cold room user charge.
- Selling of vegetables to hotels/institutions.
- Selling of vegetables to residences.
- Income for selling organic products and hand craft items.
Project Sustainability

- Multiple income streams other than cold room usage income
- Operated by trained women groups of the community. Regular performance monitoring.
- Project ownership and monitoring by Municipal Corporation
- Minimal operational expenses and maintenance agreement included
Partners below will provide specific skills and expertise, which together will contribute to effective project implementation:

<table>
<thead>
<tr>
<th>PARTNER</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rourkela Municipal Corporation</td>
<td>Project owner and responsible for administrative approvals.</td>
</tr>
<tr>
<td>District Horticulture Department/ NGOs</td>
<td>Responsible for data on vegetable production and planning. Linkage with farming clusters</td>
</tr>
<tr>
<td>Farmer Producer Organizations</td>
<td>Responsible for project awareness among farmers.</td>
</tr>
<tr>
<td>Koel Fresh Private Ltd</td>
<td>Capacity building and hand-holding Women group</td>
</tr>
</tbody>
</table>
ACHIEVEMENT AND CHALLENGE

• The growth of skill set and knowledge among women self-help group members.
• Zeal to create impact in the community.
• The opposition during construction of cold rooms delayed the timeline.
• Should have conducted a public consultation during site feasibility.
Target 2.3
By 2030, double the agricultural productivity and incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers.

Local Action:
By 2025, we will increase the income of small-scale farmers by 60% through increasing market linkages and reducing wastage.

Target 5.7
Equal rights to economic resources, property ownership and financial services

Local Action:
By 2025, we will train and employ about 25 women to operate the cold room.
THANK YOU!

Bewin Tom, Project Supervisor,
Rourkela Global Mayors Challenge project

bewin.tom@undp.org