

POWERING COLD STORAGE WITH SOLAR ENERGY AND COMMUNITY COOPERATIVES



PROBLEM

In Rourkela, India, tons of ripe produce spoil in open markets each year before reaching buyers. As temperatures rise, vegetables wilt quickly, and prices drop. While some communities have cold storage facilities, they often lack proper long-term management, leading to underutilization. As a result, **farmers need support to reduce losses and improve market sales in order to make ends meet.**



SOLUTION

Community-managed cold rooms extend the shelf-life of fresh produce, providing farmers with the confidence to grow more. Cold storage also offers farmers greater control over the timing and pricing of their harvest, boosting and stabilizing their incomes. Once installed, the cold rooms utilize solar-powered energy, offering a reliable and low-cost solution for rural communities in heat stress zones.

The project also ensures long-term success and sustainability by providing leadership and maintenance training to community-based operators.

IMPACT

Participating farmers in Rourkela, India, experienced:



- Leveraging cold rooms as small businesses have allowed farmers to grow more produce that can sell at a better price

CHALLENGES THIS IDEA CAN HELP YOU NAVIGATE

- High levels of post-harvest loss and food waste
- Limited availability of fresh produce in rural regions, particularly heat-stressed zones
- Underutilized or poorly managed cold room infrastructure

ADOPT THIS IDEA: 3 KEY STEPS

Start by

Identifying rural markets with high rates of food waste.



Installation and recruiting 1

Collaborate with local farmers to select ideal installation sites, then connect with community groups interested in managing operations.



Training 2

Train cold room operators in business, leadership, and maintenance so they can start and manage their own cold room businesses.



Outreach 3

Inform farmers that they can store their produce in the cold rooms for a small fee, enabling them to sell larger quantities at better prices.

