

Enabling farmers create more value

# **CoolCrop Intervention: Solar Cold Storage**

Up to 15% of fruits and vegetables grown in India are wasted every year\*

Lack of marketing activities, cold chain and storage facilities, improper transportation, etc. are the reasons

Unavailability of Cold storage systems and transportation being the main gaps



# **CoolCrop Intervention: Solar Cold Storage**

Customized and Modular technology can be applied across the supply chain

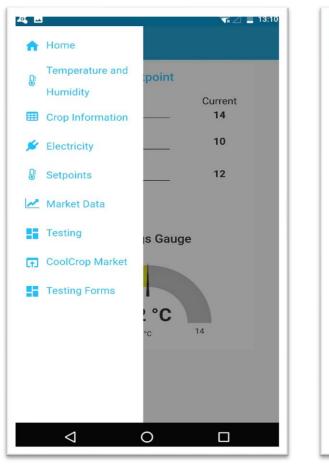
20% more efficient compared to conventional solutions

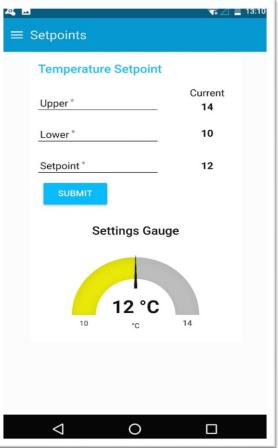
Solar PV Solution can be customized to suit the local conditions.

Crop Management Platform for easier and interactive control



## **CoolCrop Intervention: Crop Management Platform**





•	Temperature a	and Humidity	▼≈⊿ ∎	13:08
	Outside			
	Temperature	30	0.58 °C	
	Humidity	9	0.41 %	
	Inside			
	Temperature	19	9.69 °C	
	Humidity	5	8.03 %	
	<1	0		

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■ Crop Information	
Сгор	
20 Mar 2018	
Select the Crop: Radish -	
Select the Operation: Output -	
Enter the amount [kg]: 300	
Enter the price [INR/kg]: 24	
Bought From or Sold To: (Enter Phone #)	
WRITE VALUES	

### **CoolCrop Intervention: Market Analytics App**

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Market Prediction						
Market						
PADRA •						
Сгор						
Cauliflower						
Prediction Result						
Prediction after no. of days	Price Trend					
In 1 next day	Increase					
In 3 next day	Increase					
In 7 next day	Decrease					
In 14 next day	Increase					
In 30 next day	Increase					
The trends are in reference to today's price						

CoolCrop's database has crop information for the past 10–15 years from over 1300 market locations across India.

**CoolCrop's** data analytics and forecasting code is then applied to the database and presented to farmers in the form of a mobile application which informs them on expected prices for the storage duration of the produce.

https://play.google.com/store/apps/details?id=com.coolcrop

# Use Case 1: Small & Marginal farmers aggregating produce in Karnataka



The tubers were stored at 14-16 deg C for 3-4 months by the Farmer Group

- 20 farmers in Deriye, Karnataka stored the tubers for 4 months to get upto 3x price.
- Each farmer owns upto 2 acres
- Produce : Taro, Sweet Potato, Yam
- Storage strategy : Entire season 3-4 Months

#### Use Case 2: FPC operating the storage for aggregation and as a service to other in Bihar/Gujarat



The FPC has set-up the system close to a rural market. They charge up to 50 paisa/kg/day from the other farmers/traders to store their produce.

- A team of 5 people from 1000- member FPC is trained to operate and maintain the system.
- Produce Stored: Tomato, Brinjal, Pointed Gourd, Cucumber, Okra, Papaya
- Storage strategy : 1-5 days

#### Impact



26 installations across7 states in India



Average 30 MT of produce saved per month



7000 farmers served



Average 30 % increase in farmers income











"Enabling farmers create more value"



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possible.

