

## INFICOLD

### PROBLEM:

The Mahabaleshwar temple in Gokarna, Karnataka has undertaken the responsibility of 'Amrutanna Prasad Bhojan'. This initiative serves free lunches and dinners to more than 2000 devotees on a daily basis.

The temple lacked a cold storage unit for preserving vegetables, Milk and Coconuts. Lack of cold storage meant that food was getting wasted in enormous quantities.

A solution was urgently needed to prevent the heavy losses faced by the temple.

### INTERVENTION:

Inficold India Pvt Ltd. commissioned an off-grid Solar Cold Storage 6MT storage capacity for storage of fruits and vegetables that enables the temple to prepare and preserve food for devotees visiting the temple.

This system supports both pre-cooling and storage of perishables to preserve their freshness and increase shelf life.

### IMPACT:

After the installation, the wastage of vegetables and coconuts has gone down significantly. Before the installation, 800kgs of vegetables and 500 pieces of coconuts perished due to the hot and humid climate.

The reduction in food wastage has reduced the GreenHouse Gas (GHG) emissions by 700



MTCO 2 per year. Now that diesel generators have been replaced with Inficold's solar cold storage, the temple no longer incurs high diesel expenses. It also ensures that emission of GHG is minimized in the environment.

Additionally, the temple management is now buying vegetables and fruits in bulk which in turn saves the investment on commodities when purchased in smaller volumes and separately. The temple is also able to save on its transportation costs as well. GHG emissions of 19 MT CO<sub>2</sub> have been saved by eliminating Diesel generator usage.

### ABOUT THE ORGANIZATION:

Inficold Off-grid Solar Cold Storage enables farm level cooling for perishable commodities. The solar energy is stored in the Thermal Storage System for cooling during non-solar hours. TSS stores cooling energy in the form of ice, which is one of the most reliable, cost effective and non-hazardous forms of energy storage.

Cooling is transferred from TSS to cold storage through refrigerant (known as DX cooling). Refrigerant cooling loops are more energy efficient and have high cooling rates than traditional water/glycol-based systems. The system can be powered by a grid during extended cloudy conditions.