## **Benefits**

#### **For Farmers**

- Better quality products. More hygenic save from dust, insects, birds, pollutants etc.
- More shelf life of agro products. Farmers can sell their products when rates are good.
- Reduce wastage
- Save timing of drying as compare to open drying
- Financial earning to farmers
- No running cost. Runs completely on solar energy

## For Industries

- lower operating costs
- perm² of solar collector area equivalent of replacing 500 watt of heater
- decreased reliance on fuels that need to be transported to remote sites
- Can be easily integrated with existing system; can be easily incorporated into tunnel, trough or conveyor dryers.
- may provide all of the heat during a sunny day or act as a pre-heat during cloudy conditions.
- GHG emission reductions
- producing a high-quality Hygenic product that is eco-friendly and was processed using "clean & green" energy.



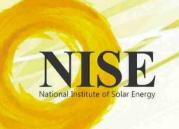


## Contact Us: National Institute of Solar Energy

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# SolDry Solar Dryer









## NATIONAL INSTITUTE OF SOLAR ENERGY

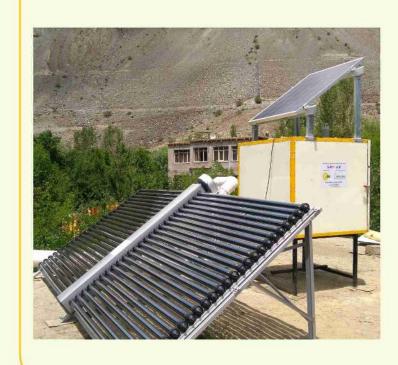
An Autonomous Institute of
Ministry of New and Renewable Energy, Govt. of India
Website: www.nise.res.in

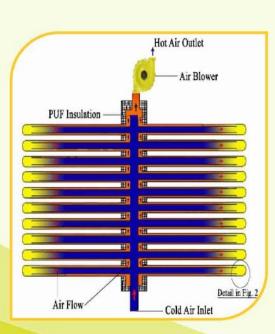
## **SolDry**: A New Way for Drying Your Products

The SolDry is a solar based dryer cum space heating system designed and developed by National Institute of Solar Energy.

Many of the world's most important crops need to be dried to remove moisture as part of the production process. Removing the moisture from crops such a coffee beans, tea leaves, cocoa, nuts, fruit, rice, spices, corn, chips, etc. is an essential process that helps transform the raw goods into the final product.

SolDry can be used for a variety of agricultural process applications. In addition to its substantial usage for poultry and livestock ventilation and space heating it is also ideally suited for other agricultural applications, such as crop and process drying.





## About the technology

The system uses dual jacketed evacuated tube based solar air heater to heat large volume of incoming air up-to 120 degree celsius.

The system is very efficient delivering, 500 watt of heat per m² of solar collector area. The hot air generated is delivered to drying chamber for drying purposes or to building/houses for space heating purposes. The system is also enabled with cost efficient thermal storage system for non-sunshine hours working.



#### **Agriculture Drying Applications**

- Coffee beans
- Tea withering/drying
- Chips
- Biomass
- Nuts
- Fruit
- Vegetables

- Spices
- Pulses
- Corn
- Cocoa beans
- Fish
- Rubber
- others

### Other Applications

- Industrial process heating
- Space Heating
- Laundry drying
- poultry and livestock ventilation



Dried Apple



Dried tea Leaves



Dried tomatoes



Dried potatoes



Dried Chillies



Dried apricot



Dried Pineapple